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REPORT

ON THE

ADMINISTRATION OF BENGAL,

1877-78

Calcutta:

BENGAL SECRETARIAT PRESS.

1878.

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ADMINISTRATION OF BENGAL,

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Summary.

THE Administration Report of Bengal for 1877-78 has been drawn up in accordance with the orders of the Secretary of State and the Government of India, which prescribe the form which it should take and the mode of treatment which the various subjects should receive. Of late years there has been some tendency to depart from these instructions, and to give the report a more or less discursive character. It is understood that what the local Government is really required to furnish is a concise record of the realized administrative facts of the year, mainly for purposes of official reference. Such a record is obviously not intended to be an argumentative vindication of the policy of Government, or to be made a vehicle for the speculative discussion of questions which have no immediate bearing upon the actual occurrences of the year under report. Such discussions are apt to raise hopes which may never be fulfilled, and are not unfrequently quoted as pledges of a policy, which Government may at a future time find itself unable to carry out.

Sir Ashley Eden was Lieutenant-Governor of Bengal throughout the year, having been formally confirmed in the Lieutenant-Governorship with effect from the 1st May 1877.

The Lieutenant-Governor spent a considerable time on tour, visiting the more important districts of the Lower Provinces. Formal receptions were held at several places, when the sunnuds of titles of honor which had been conferred upon native gentlemen by the Government of India were formally delivered, and the Lieutenant-Governor took the

opportunity of expressing his views on various important public questions, such as the regulation of the Vernacular Press and the reforms called for in the working of the indigo industry in Behar.

Comparatively few administrative changes took place.

Changes of administration. The increase of work and responsibility thrown upon the local Government by the readjustment of its financial relations with the Government of India, and the extension of the system of provincial finance, rendered necessary an increase in the Secretariat staff. The Political Agency of Hill Tipperah was abolished, the Magistrate of the British district of Tipperah being appointed ex-officio Political Agent. The younger brother of the Maharajah of Dumbunga was appointed an Assistant Magistrate and Collector on probation. In pursuance of a scheme for the reorganization of Marine affairs, which had been under the consideration of the Government of India for some years, the management of the Dockyard was withdrawn from the local Government, and certain duties hitherto discharged by the Master Attendant were transferred to a Superintendent of Marine, whose jurisdiction extends to the whole of the Bay of Bengal and the eastern coast of the peninsula. An important reform was effected by withdrawing the control of the provincial medical work from the hands of the Surgeon-General of Indian Medical Department and appointing a separate Surgeon-General for Bengal. At the same time the Inspector-General of Jails and the Sanitary Commissioner were appointed ex-officio Inspectors of Civil Hospitals and Dispensaries in the Lower Provinces.

Political. The tranquillity of the Tributary States under this Government was undisturbed during the year. The Deb Rajah of the neighbouring State of Bhootan, however, was engaged during the greater part of the period in a struggle with some of his subjects, and a number of these, headed by the Poonakha Jungpen and the Paro Penlow, took refuge in British territory on the final collapse of their cause. The Deb Rajah applied for their surrender, while the insurgents invited this Government to intervene on their behalf. Both applications were refused in accordance with the fixed policy of Government to abstain from all interference in the internal affairs of Bhootan. These troubles were purely local, and in no way reacted on the people under British rule.

The Deputy Commissioner of Darjeeling and the Under-Secretary in the Political Department visited Sikkim in October, and delivered to the Maharajah the banner which was to have been presented to His Highness at the Delhi Assemblage had His Highness been able to attend. A medal and ring, presents from His Royal Highness the Prince of Wales, were delivered at the same time. The Maharajah took the opportunity of declaring his loyalty and devotion to the British Government. The Sikkim peasantry appeared to the mission to be prosperous and contented.

In Cooch Behar the year was not a prosperous one. The crop was short, and the people were consequently unable to reap much advantage from the rise in the prices of produce caused by the distress in Southern India. Since the close of the year the marriage of the young Maharajah has been celebrated, and he has left India on a visit to Europe.

On the north-eastern frontier unbroken quiet reigned throughout the year. In Hill Tipperah an important step was taken by the Maharajah in the adoption of rigorous measures for the repression of slavery. The system of frontier police in the Chittagong Hill Tracts has worked very satisfactorily, and arrangements for securing regular communication between the frontier posts of Hill Tipperah and the Chittagong Hill Tracts are in progress. The frontier guards of the Chittagong Hill Tracts and Arracan are already in communication. The annual durbār and fair at Demagri was largely attended by the chiefs of the Syloo and Thanglowa clans. The Howlongs held aloof, owing, as they said, to their apprehension of raids by the Shindoos during their absence, but in reality, it is believed, because one of their chiefs, Saipoiya, was in disgrace on account of his connection with an outrage committed on British territory. This coldness will probably soon be removed. A good deal of damage was done to the crops in the Hill Tracts by the heavy rainfall in August and September, and by the overflowing of the Kurnafoolce river. The trade of the district was languid, and there was some distress among the people.

The conduct of the chiefs of the Tributary States on the borders of Orissa and on the south-western frontier was, with rare exceptions, very satisfactory, and the tribute was in all cases punctually discharged. For some years it has been the pleasing duty of Government to acknowledge the specially excellent administration of the Maharajahs of Keonjhar and Mohabhanj. The Rajahs of

Atgarh, Nursingpore, Nayagarh, Pal Lehara, and Bonai have also managed their estates with discretion and contributed to the happiness and prosperity of their people. The Lieutenant-Governor had the satisfaction this year of restoring to the direct care of the Maharajah of Mokrblunj the pergunnah of Bamunghatty, which has, since the troubles of 1866, been under the management of the Deputy Commissioner of Singbhoom. The conduct of the chiefs of Runpore, Talchero, and Duspalla was unsatisfactory; but measures have been adopted for a proper settlement of the land in those states, and for the protection of the people from extortionate exactions.

Seven professional parties were employed on surveys in different parts of the Lower Provinces.

Surveys.

Two of these were engaged in a cadastral survey of the lands irrigable from the Sone Canals in Behar. Although the extreme smallness of the fields rendered the operations slow and costly, 712 square miles were surveyed by the two parties at a cost of 7 annas 1 pie per acre. Another party was employed on a similar survey of the Government estate of Khoorda, in Orissa. Here, however, owing to certain special difficulties, the outturn of work was only 133 square miles, while the cost rose to 14 annas 9 pies per acre. This class of survey has been shown to be quite unsuited to such a wild and half cultivated country. The professional survey of dearah or fluvial lands in the districts of Furreedpore and Backergunge was completed, with an outturn of 952 square miles, surveyed at a cost of Rs. 61,201. Arrangements have been made for the conduct of dearah surveys in future by a non-professional party working under the supervision of the Board of Revenue. Professional surveys were also in progress on two wards' estates in Chota Nagpore, the cost of the work being borne by the estates themselves. Non-professional surveys under the control of the Board of Revenue were carried on in connection with the professional surveys in Midnapore and Khoorda. Some misunderstandings between the professional Survey Department and the Board of Revenue attracted the notice of Government during the year, and steps are being taken to define the relation of these two authorities in the matter of revenue surveys.

There were 733 settlements effected during the year, yielding a net increase of revenue of Rs. 43,224, while 11,187 settlements,

Settlements.

involving a revenue of Rs. 9,77,083, were pending at its close. Among these the most important were the noabad settlements in Chittagong, the settlement of the Government estate of Khoorda in Orissa, and the operations carried on in the Western Dooars, the Darjeeling Terai, and the temporarily-settled estates of Majnamutha and Jellamutha in Midnapore. Owing to the absence on leave of the Settlement Officer the completion of the Sonthal Pergunnahs had to be postponed till the next field season. Settlement work throughout Bengal has been much facilitated by the passing of Act III (B.C.) of 1878, which lays down a procedure to be followed for bringing the under-tenants and ryots to an early decision with respect to the Settlement Officer's rates, and giving *a priori* validity to these until they are set aside by a decree of court.

Including 23 ryotwari tracts, there were 2,592 Government estates on the revenue roll during the year. The current revenue demand amounted to Rs. 21,57,227, and the arrear demand to Rs. 7,62,127, making a total demand of Rs. 29,19,354. The amount remitted as irrecoverable was Rs. 71,569. The uncollected balances of both current and arrear demands were Rs. 9,06,618, or 31 per cent. of the gross demand. Special explanations have hitherto been required in all cases where the total collections of the year fell short of 90 per cent. of the entire demand, both current and arrear. Only seven districts reached the required standard, and it has been found necessary to modify to some extent the test hitherto applied. Less attention will in future be paid to mere percentages, and more to the real condition of the property as evidenced by the amount of the arrear demand and its annual growth or diminution. Besides the Government estates a large number of estates belonging to private persons were under the charge of Government officers. The total number of estates under direct management during the year was 8,380. The general principles which should govern the direct management of Government estates came under discussion, and it was found that there had been too great a tendency to force the same system on all parts of the country, without sufficient regard for local peculiarities and customs. In particular it was found that the condemnation of the farming system had been too sweeping and general, and that in some districts in a modified form it is well suited to the wants and agricultural

condition of the people, while in others it is doubtful whether reclamation and improvement of land can be looked for under any other system.

Considerable difficulty is always experienced in obtaining returns punctually from the numerous properties under the management of the Court of Wards. In consequence of this the information given on the subject in last year's Administration Report related to the year 1875-76, and complete returns have not yet been received for 1877-78. In 1876-77 there were 469 estates under the management of the revenue authorities. Of these, 66 were wards' estates managed under Act IV (B.C.) of 1870, 19 were estates of lunatics placed under the charge of the Collector by order of a civil court, 42 were estates of minors similarly made over to the Collector, two were shares belonging to disqualified proprietors and managed by the revenue authorities under orders of a civil court, 339 were attached estates, and one was the Chaklajat estate of the Maharajah of Cooch Behar, managed by the Board of Revenue under the special orders of Government. The total demand of rent on all these estates amounted to Rs. 1,58,91,201, of which Rs. 75,11,114 represented the current demand of the year, while Rs. 83,80,087 was arrear demand on account of previous years. During the year Rs. 68,84,680 were collected on account of the arrear and current balance, and Rs. 90,97,201 remained outstanding at the close of the year. Owing to the release of 103 estates, and the fact that only 77 new estates were brought under management, the number of estates administered by Government officers fell from 469 to 443 during the year 1877-78. In the absence of full returns a complete statement of the financial position of these estates cannot be furnished. A detailed account of the principal estates in each division of Bengal will be found in the body of the report.

During the year under review only three bills were actually passed into law by the Council of the Lieutenant-Governor of Bengal. Of these the most important was the Bengal License Act, which was designed to enable the local Government to meet the liabilities imposed upon it by the financial policy of the Government of India. It provided for the levy of a license fee on trades, dealings, and industries throughout Bengal. Acts were also passed extending the provisions of the Labour District Emigration Act to Chittagong and the

Wards' estates.

Course of legislation.

Chittagong Hill Tracts, and for defining or limiting the powers of settlement officers with regard to the enhancement of rent. Several bills were introduced into the Council during the past session, which became law after the close of the year. The Irrigation Bill will not be proceeded with for the present, as it is probable that the voluntary system of water leases will in time bring in as large a return on the State outlay as can be expected under any system. There has been a very largely increased demand for water from the irrigation canals in the past two years, and almost as much water is now given as can be guaranteed with the present distributaries. A bill to provide a more summary procedure for the recovery of arrears of uncontested rent has been referred to the Government of India for introduction into the Council of the Governor-General for making Laws and Regulations.

The gross charge for police during the year amounted to Rs. 38,42,647, and the average cost of Police, the purely civil force in the interior was about seven pies for each inhabitant. Considerable reductions and changes in distribution were undertaken by the Inspector-General, and a yearly saving of Rs. 1,65,048 was effected without affecting the real efficiency of the force. The working of the Village Chowkidari Act was generally successful, and it is clear that where the local officers exert themselves to control the proceedings of the punchayets a considerable improvement on the old system may be effected under that Act. "The conduct of the police was fair, and if there were here and there isolated instances of gross misconduct there were also cases of conspicuously good service. "Of the Inspectors and Sub-Inspectors more than 98 per cent., of the head constables 85 per cent., and of the constables 37 per cent., can read and write, and a large number of men are under instruction. The general health of the force was not so good as in 1876.

The orders of Government have repeatedly urged upon the superior officers the necessity for constant personal supervision of the proceedings of the police, especially in the outlying stations; and there is reason to believe that increased attention is now being paid to the important duty of inspection by District Superintendents.

In the interior there were 108,989 cases of cognizable crime, against 117,559 in 1876. The decrease is in part the result of the orders of Government prohibiting the wholesale institution of prosecutions for bad livelihood, and

in part the result of a change in the instructions for the classification of cases. There was a very satisfactory decrease in the number of false cases instituted, and there is some ground to hope that a permanent improvement may be brought about in this respect. Convictions were obtained in 38 per cent. of the cognizable cases inquired into, and against, 59 per cent. of the persons arrested in connection with them. Nearly one-third of the property stolen was recovered. The turbulence of the people in some of the districts of the Dacca Division was more marked than usual, and it was found that in one district at least the local officers were seriously to blame, and that a change in the administration was called for. One of the most satisfactory features in the provincial returns was the sustained decrease in dacoity. There were only 138 cases, against 154 in 1876 and 254 in 1875. The decrease was most conspicuous in the Presidency and Burdwan Divisions. The police were generally unsuccessful in the investigation of river dacoities. In the Hazareebagh and Gya districts there was an outbreak of highway robbery, and special measures were adopted for the protection of travellers on the loneliest parts of the principal roads. There was little fluctuation in minor offences against property or in non-cognizable crime. The Government orders directed against the abuse of the bad livelihood sections of the Criminal Procedure Code affected only the returns of the latter half of the year under notice. In the first half of the year a large number of prosecutions were instituted in accordance with the former practice, and the Government had again to remark with displeasure on the palpable evidence of hardship to the people which the results of these measures disclosed. The Mugheya Domes were the only criminal tribe that gave any trouble during the year. They attempted to carry on their robberies among the villages on both sides of the Nepal boundary, but their depredations were promptly suppressed by the judicious action of the local authorities.

There was little fluctuation in the number of offences committed in Calcutta. The Government had, however, occasion to remark on the large number of persons improperly arrested on suspicion. The attention of the Commissioner was specially directed to the desirability of enlisting as many Bengalis as possible in the force and reducing the number of ignorant up-countrymen among the constables. In no instance was it found necessary to proceed against the

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During the year under review only three bills were actually passed into law by the Council of the Lieutenant-Governor of Bengal. Of these the most important was the Bengal License Act, which was designed to enable the local Government to meet the liabilities imposed upon it by the financial policy of the Government of India. It provided for the levy of a license fee on trades, dealings, and industries throughout Bengal. Acts were also passed extending the provisions of the Labour District Emigration Act to Chittagong and the

Course of legislation.

Chittagong Hill Tracts, and for defining or limiting the powers of settlement officers with regard to the enhancement of rent. Several bills were introduced into the Council during the past session, which became law after the close of the year. The Irrigation Bill will not be proceeded with for the present, as it is probable that the voluntary system of water leases will in time bring in as large a return on the State outlay as can be expected under any system. There has been a very largely increased demand for water from the irrigation canals in the past two years, and almost as much water is now given as can be guaranteed with the present distributaries. A bill to provide a more summary procedure for the recovery of arrears of uncontested rent has been referred to the Government of India for introduction into the Council of the Governor-General for making Laws and Regulations.

The gross charge for police during the year amounted to Rs. 38,42,647, and the average cost of Police. the purely civil force in the interior was about seven pias for each inhabitant. Considerable reductions and changes in distribution were undertaken by the Inspector-General, and a yearly saving of Rs. 1,65,048 was effected without affecting the real efficiency of the force. The working of the Village Chowkidari Act was generally successful, and it is clear that where the local officers exert themselves to control the proceedings of the punchayets a considerable improvement on the old system may be effected under that Act. "The conduct of the police was fair, and if there were here and there isolated instances of gross misconduct there were also cases of conspicuously good service." Of the Inspectors and Sub-Inspectors more than 98 per cent., of the head constables 85 per cent., and of the constables 37 per cent., can read and write, and a large number of men are under instruction. The general health of the force was not so good as in 1876.

The orders of Government have repeatedly urged upon the superior officers the necessity for constant personal supervision of the proceedings of the police, especially in the outlying stations; and there is reason to believe that increased attention is now being paid to the important duty of inspection by District Superintendents.

In the interior there were 108,989 cases of cognizable crime, against 117,559 in 1876. The decrease is in part the result of the orders of Government prohibiting the wholesale institution of prosecutions for bad livelihood, and

in part the result of a change in the instructions for the classification of cases. There was a very satisfactory decrease in the number of false cases instituted, and there is some ground to hope that a permanent improvement may be brought about in this respect. Convictions were obtained in 38 per cent. of the cognizable cases inquired into, and against 59 per cent. of the persons arrested in connection with them. Nearly one-third of the property stolen was recovered. The turbulence of the people in some of the districts of the Dacca Division was more marked than usual, and it was found that in one district at least the local officers were seriously to blame, and that a change in the administration was called for. One of the most satisfactory features in the provincial returns was the sustained decrease in dacoity. There were only 138 cases, against 154 in 1876 and 254 in 1875. The decrease was most conspicuous in the Presidency and Burdwan Divisions. The police were generally unsuccessful in the investigation of river dacoities. In the Hazareebagh and Gya districts there was an outbreak of highway robbery, and special measures were adopted for the protection of travellers on the loneliest parts of the principal roads. There was little fluctuation in minor offences against property or in non-cognizable crime. The Government orders directed against the abuse of the bad livelihood sections of the Criminal Procedure Code affected only the returns of the latter half of the year under notice. In the first half of the year a large number of prosecutions were instituted in accordance with the former practice, and the Government had again to remark with displeasure on the palpable evidence of hardship to the people which the results of these measures disclosed. The Mugheya Domes were the only criminal tribe that gave any trouble during the year. They attempted to carry on their robberies among the villages on both sides of the Nepal boundary, but their depredations were promptly suppressed by the judicious action of the local authorities.

There was little fluctuation in the number of offences committed in Calcutta. The Government had, however, occasion to remark on the large number of persons improperly arrested on suspicion. The attention of the Commissioner was specially directed to the desirability of enlisting as many Bengalis as possible in the force and reducing the number of ignorant up-countrymen among the constables. In no instance was it found necessary to proceed against the

consignees of horses for the removal from India of persons brought up from Australia in charge of the animals. An important scheme for the amalgamation of the Almshouse and the Workhouse was and is still under consideration, and it is believed that this measure will have the effect of discouraging professional mendicancy among Europeans and Eurasians.

Altogether 162,914 persons appeared before the Magistrates' courts during the year. Of these Criminal justice. 22,848 were discharged without trial, 35,474 were acquitted, 96,984 were convicted, and 2,876 were committed for trial by higher tribunals. The number of witnesses who attended the different courts was 406,380. The working of the Benches of Magistrates in the interior was on the whole very satisfactory. Two Benches of Magistrates for the town of Calcutta were formed under the Presidency Magistrates' Act, and their administration during the year was all that could be wished. Arrangements have during the current year been made for an independent bench to sit once a week under the guidance of a chairman elected by the Honorary Magistrates from among their own number. The number of recorded re-convictions during the year was 4,181, against 3,714 in 1876 and 3,075 in 1875. The number of persons whipped by order of judicial authority was 3,423. In 723 cases the number of stripes inflicted was less than 10, and attention has been drawn to the inexpediency of awarding trifling punishments of this nature.

The number of persons in confinement was largely diminished during the year. On the 1st Prisons. January there were 21,266 in prison: on 31st December there were only 18,153, the lowest number attained since 1872. This was chiefly due to the effect of the orders regarding the wholesale imprisonment of persons suspected of bad livelihood by the police, and in a smaller degree to the generally favourable harvest and the high prices of agricultural produce. The jail population, which had risen steadily from the beginning of the year, decreased as steadily from the issue of those orders till the close of the period. The number of releases was nearly the same as in 1876.

Some difficulty has been experienced in carrying out the central jail system to its full extent, as, although the existing central jails can accommodate more than the number of convicts sentenced to the longer terms of imprisonment, their

distribution is such that those situated in the western districts are never filled, while the Alipore Jail has always more prisoners than it can properly accommodate. It was therefore decided to convert the Dacca District Jail into a central prison for the eastern districts. New district prisons are also required in many places, and the necessary works are being pushed forward as rapidly as the provincial finances will admit. Proposals were laid before Government during the year for the utilization in undertakings of this class of convict-labour under professional supervision; and this system has already been adopted with advantage. While difficulties arising from deficient accommodation and the insecurity of the buildings beset the Jail Department, it is obvious that any complex system of classification of prisoners is out of the question, even if jail officials with the necessary qualifications and experience were available. What is really essential, however,—the segregation of habitual or vicious criminals from prisoners convicted of a first offence,—has now been secured. More than this cannot for a long time to come be attempted, and indeed it is a question whether, having regard to the special circumstances of crime in this country, the demand for very detailed and intricate classification may not be carried a great deal too far. The number of offences against jail discipline during the year was greater than in 1876. No less than 27,112 had reference to insufficient task-work or petty breaches of rule which strict management brings to light.

The number of escapes was smaller than in any previous year. The extension of the system of double gates which has been effected will operate still further to reduce the number. The general introduction of the warder system also cannot fail to produce excellent results. Escapes have been specially rare from such of the Bengal jails as have been provided with warder guards.

The average cost of maintaining each prisoner in jail during 1877 was Rs. 58, a higher charge than was incurred in any one of the four previous years. An examination of the expenditure in each jail showed that great waste of money had resulted from the want of efficient central control. In many jails the charges for diet, guarding, and clothing were very much higher than in neighbouring prisons similar in construction and capacity and subject to similar general conditions. The present Inspector-General is giving this subject the necessary attention.

The outturn of jail manufactures was more satisfactory than in 1875, and the average earnings of each prisoner were Rs. 17-5, against Rs. 10-5. In some jails, however, notably in Monghyr, Durbhunga, and Patna, the results were still most unsatisfactory. The manufactory department of the Alipore Jail was very successfully managed, and the gross profit earned by it was Rs. 1,43,900. It was found that while the Presidency Jail was without a special industry on which the strength of its convict population could be concentrated, the system of carrying on both gunny-weaving and printing in the Alipore prison had not been found altogether satisfactory in respect either of profit or of discipline. It was therefore decided to relieve Alipore entirely of printing work. Arrangements were made to have the greater part of the printing business of the Bengal Government executed at the Presidency Jail. The bulk of the Secretariat printing apparatus was transferred there, and employment was at once provided for more than 600 prisoners in the various branches of this industry. The results of this change have been most satisfactory from every point of view. It now seems quite established that the only way of securing really continuous hard labour in jails is by providing some special industry for each central jail, and employing machinery worked by convicts, which, while not admitting of idleness and carelessness on the part of those employed in the mills, at the same time provides material for useful hard labour for the rest of the jail population. It has been the aim of Government to arrange for some special industry for each of the large jails. During the year arrangements were in train for the establishment of a woollen factory at Bhagulpore, and considerable progress was made in the development of coir manufacture at Midnapore.

The health of the prisoners was not so good as in the previous year, but sickness, though more general, was of a less severe type. The unhealthiness of some of the jails is undoubtedly the result of deficient accommodation or other special circumstances, which will be remedied in due course. In deciding upon the new jails to be constructed, special consideration was given to those cases in which the cause of the ill health of the prisoners had been distinctly traced to remediable defects. Cholera appeared in 29 out of the 48 jails in the province, and deaths occurred in 25. The disease was much more prevalent in the Behar Jails than in those of Bengal proper. There was no cholera in the jails of Orissa, and only one mild case in those of Chota Nagpore.

*The construction of the Reformatory buildings at Alipore was nearly completed during the year. The Reformatory Schools' Act has since been extended to Bengal, and about 68 young criminals are now confined in the institution.

The total number of original suits disposed of in all the civil courts, inclusive of the High Court, was 389,277, against 379,728 in 1875.

Civil justice. There were still 2,848 regular and special appeals pending before the High Court at the close of the year. This Government has repeatedly urged the necessity which exists for providing a new machinery for the rapid disposal of civil appeals of this class. While the mass of arrears constantly before the High Court remains as it is, the administration of civil justice cannot be said to be on a satisfactory footing. At the close of the year there were 11,423 civil and 8,055 revenue appeals pending before District Judges, and 4,451 appeals pending before Subordinate Judges. The Small Cause Court of Calcutta decided a larger number of suits of high value than in any previous year. This was the result of the great stimulus given to trade by the scarcity in Southern India. The sudden collapse of trade in the last quarter of the year continued to produce the same effect, numerous suits being laid for damages on account of failure to ship goods.

The extraordinary expansion which the operations of this department have for some time exhibited was specially marked during the year. Registration. The total number of registrations was 550,269, against 465,574 in the previous year and nearly double the number effected in 1872-73. The returns showed that registration was becoming rapidly more popular in Behar, and in most of the districts of that province a marked increase was observable. This was specially the case in Chumparun, where the registrations, chiefly of agricultural leases, numbered 27,299, or 126 per cent. more than in the previous year. The extension of the system of perpetual leases in Central Bengal was a source of much satisfaction to Government. The returns showed some falling off in the number registered in most of the eastern districts; but this was the natural result of several years of activity in registering documents of this class. The financial condition of the department is satisfactory. Several measures for the improvement of its administration were inaugurated during the year. Chief among these were the adoption of a definite system for the determination of the salaries of rural sub-registrars paid by

a proportion of the fees, and provision for more regular and efficient inspection of rural offices by district and sub-divisional officers and special sub-registrars.

• The Mahomedan Marriage Registration Act was in force in 14 districts, but it cannot be said to have yet gained much popularity, while in places it is actually unpopular. Only 9,390 ceremonies were registered during the year among a Mahomedan population of over 10 millions. The law, however, is still new to the people, and sufficient experience has not yet been gained for a definite judgment on its merits.

Municipal administration in Bengal is based on two Acts of the Bengal Council, viz. Municipal administration. Act IV of 1876, which regulates the affairs of the Calcutta Municipality, and Act V of 1876, which applies to all other Municipalities in the province. The former Act gave to the town of Calcutta for the first time an elective system, which came into operation in October 1876. The new Corporation is composed of 72 Commissioners, of whom 48 are elected and 24 nominated by Government; the Chairman and Vice-Chairman are also Commissioners *ex officio*. The year 1877 was the first working year under the new system, and it is hoped that some progress in sanitary improvement was made; but the Municipality has not succeeded in maintaining an efficient control over its financial affairs, while the elective system has failed to secure for the town the services of the best class of either native or European representatives.

The number of Municipalities in the interior of Bengal during 1877-78 was 193, of which 25 were first class Municipalities and 97 second class, while there were 69 Unions and two Stations. The system of representation by election is in force in only three towns in the mofussil, namely Burdwan, Serampore, and Kishnaghur. The gross income of all the Municipalities during the past year amounted to Rs. 20,07,728, and the expenditure to Rs. 19,90,592. Great improvements are called for in the sanitation of most Municipalities, and though the want of money stands in the way, more is now being done in this direction than was formerly the case.

In pursuance of a scheme of reorganization which had been for some time under the consideration of the Government of India, the whole of the marine establishments have been amalgamated into one Marine.

imperial service, under the title of 'Her Majesty's Indian Marine.' An officer, styled 'Superintendent of Marine,' has been appointed to administer all marine establishments, dock-yards, and vessels on the Eastern side of India, acting at the same time as the adviser of the local Government in all marine matters. Some of the duties hitherto discharged by the Master Attendant have been transferred to the Superintendent of Marine. The designation of Master Attendant has been changed to that of Port Officer, and it is proposed to transfer the cost of the Port Officer and his establishment to Provincial Services.

At the end of the year the pilot service numbered 68 members, or two below the sanctioned strength; 43 belonged to the covenanted service, and 25 were licensed pilots. The scheme for the reorganization of the pilot service has so far worked well, although numerous memorials against it were at first received from pilots who considered themselves individually aggrieved by the new rules. Seven leadsmen apprentices, selected from the training ships in England under the new system of recruiting the service, arrived in India during the year, and were posted to pilot brigs to learn their profession. New leave rules for pilots have been drawn up by a Committee appointed for the purpose, and await the sanction of the Secretary of State. The system of applications for pilots to take ships from Calcutta has been modified in some particulars, with the object of preventing abuses and distributing the work of the river as fairly as possible.

The number of vessels arriving at and leaving the port rose from 2,282 to 2,693, and the total tonnage increased from 3,294,951 tons to 4,043,985 tons. Much of this increase was due to the number of short voyages to and from the ports of Madras and Bombay in connection with the export of grain to the distressed districts of those provinces. Sixty-one accidents occurred on the river, in nine of which material damage was sustained by ships, while in five cases native craft were sunk. Special courts under Act IV of 1875 were held on three occasions during the year. The work of the Hooghly survey was facilitated by the substitution of the steamer *Clyde* for the sailing vessels formerly attached to the survey, and a complete resurvey was made of the more important channels of the river. The pilot vessels and houses of refuge for the shipwrecked were kept in good order. Act XIII of 1878 was passed to facilitate the recovery of expenses incurred in relieving distressed seamen in foreign

and colonial ports. The Shipping Master and Deputy Shipping Master of Calcutta have been empowered under this Act to sue for the recovery of these sums in case the ships or persons chargeable are found in this country.

During the year 701 vessels were inspected on arrival by the Health Officer of the port. Malarious fever and cholera were found to be the most prevalent diseases among shipping lying in the river, and cholera was specially rife among vessels moored near the outlet of the drainage of Fort William. The Government of India has as yet been unable to carry out the unanimous recommendations of the Committee appointed to consider the question of the disposal of the Fort sewage. Twenty cases of scurvy occurred on board of four vessels in consequence of the lime juice supplied to the crew being deficient in strength. Action was taken to remedy the defect under Act I of 1859. Good water was provided for the shipping from the Municipal hydrants throughout the year, and a number of nuisances which had existed on the river banks were abated.

The working of the Port Trust under Act V (B.C.) of 1870 continued to be thoroughly satisfactory. Up to the close of 1878 the Port Commissioners had spent Rs. 79,31,653 on works of port improvement, their debt to Government amounting to Rs. 49,30,482. Several important improvements were effected during the year, and others have already been sanctioned or are in contemplation. The net revenue derived from the working of the jetties rose from Rs. 1,83,229 to Rs. 3,74,624 in consequence of the very great increase in the number of vessels visiting the port. The total revenue of the Port Commissioners from jetties, inland vessels' wharves, and Strand Bank lands was Rs. 14,93,467, as against Rs. 11,06,034 in 1876-77, and their expenditure Rs. 7,86,041, as against Rs. 7,08,432 in the previous year. The income of the port proper was Rs. 6,90,873, and the expenditure Rs. 4,70,839, as against Rs. 5,24,806 and Rs. 4,66,062, which were the income and expenditure of 1876-77. The surplus revenues are being devoted to works of improvement calculated to increase the facilities offered to trade, and since the close of the year reductions have been effected in the scale of fees. Some difficulties were experienced at one time by reason of the extraordinary demand for cargo boats by vessels shipping grain for Madras, and it was supposed that the construction of jetties had discouraged the building of these boats; but after full inquiry it was shown that the

number of cargo boats in the port had actually increased since the jetties were built, and that the action of the Port Commissioners was not to blame for the failure of the appliances of the port to meet an exceptional strain.

The trade of Chittagong, which had been declining for some time, began to revive during 1877-78. The number of vessels visiting the port rose from 1,791 to 2,000; and the tonnage increased by 26,114 tons. Enhanced exports of grain to the foreign ports of Mauritius and Bombay and to the Coromandel coast of Madras showed that trade had recovered from the serious disturbance caused by the cyclone of 1876. There is reason to hope that the development of the jute trade between Naraingunge and Chittagong will remove the main obstacle which has hitherto deterred European vessels from trading direct with Chittagong, namely the difficulty of obtaining a return freight.

A special loan of Rs. 30,000 has been sanctioned by the Government of India for the improvement of False Point in Orissa. This question was carefully considered by the Lieutenant-Governor on his visit to Orissa, and it was decided to carry out certain measures of improvement, which are noticed in detail in the body of the report. A native pilot service has been organized on the comparatively unknown approaches to the rising port of Chandbally, and a weekly steam service has been established between Chandbally and Cuttack through the Kendrapara and Gobree canals.

The system of meteorological registration introduced two years ago was carefully maintained. Observations were received from 173 stations in all, 154 of which recorded merely the rainfall, while at the remaining 19 scientific observations of a somewhat elaborate character were taken. The atmospheric pressure during the greater part of the year was in excess of its normal amount, although the mean monthly temperature was below the average. The mean wind directions were nearly normal, but the lower air currents showed a marked reduction of velocity. Severe thunderstorms occurred in Midnapore during February, and a small cyclone visited the neighbourhood of False Point on the 8th April. The effects of the Madras cyclone of the 18th May extended to these provinces and produced stormy weather and heavy rainfall over a large area. Details are given in the body of the report regarding the rainfall of the year, which was fairly up to the average, and well distributed in Bengal and Chota Nagpore. In

Meteorology.

Behar the districts of Gya, Shaltabad, Sarun, and Chumparun suffered from a defective supply, and the fall was also short on the Orissa Coast south of Pooree.

The average rainfall of the whole province was 58·87 inches, which may be looked upon as a fair average. The rainfall of the first quarter was above the average, that of the second and third quarters was up to the average, while the rainfall of the fourth quarter showed a deficiency, which in many places injuriously affected the important winter rice harvest.

The harvests of the year were on the whole good, but very high prices prevailed owing to the large quantity of grain exported to the famine-stricken provinces of Madras and Bombay. The rise in prices was a source of gain to the cultivators and to those who shared in their profits, but caused some distress among people dependent on small fixed incomes, or on charity, and possibly among day-labourers in places where the unusual amount of export did not lead to an additional demand for labour. While, therefore, the year was one of great prosperity for some classes, there were others which suffered considerably.

Considerable additions have been made to the herbarium of the Royal Botanical Garden, and this building, as well as the library, will shortly be enlarged, so as to facilitate scientific work. Valuable contributions of living plants and seeds were received in the garden from Sir Joseph Hooker, Dr. Thwaites of Ceylon, and other gentlemen. The project for the formation of a branch Botanical Garden at Rungaroon was abandoned, and in its place a branch Botanical Garden will be established at Darjeeling. The soil and climate of Rungaroon are not suited for such a garden, but in Darjeeling a good site has been secured through the liberality of a private gentleman, and many useful experiments can be undertaken there, more especially in connection with the proposal of the Home Government to grow in India as many as possible of the drugs used in medicine and now imported from England at great expense. A series of experiments with vanilla and ipécacuanha has shewn that these plants cannot be grown successfully as a crop in any part of Bengal. The experimental cultivation of the carob of the Mediterranean, the *baobab*, and various species of *eucalyptus*, also proved unsuccessful. Specimens of several kinds of grasses were

sent to England for the purpose of ascertaining whether they could be utilized in the manufacture of paper. A favourable opinion was given of some of these fibres, and it was proposed to try experiments with them in the jails where paper-making has been adopted as a regular jail industry. A scheme which had been put forward by an English paper manufacturer for growing bamboo stocks as material for paper was tested during the year. Details of the experiments will be found in the body of the report.

— Forty square miles of forest were added to the Government reserves in 1877-78, and the total area was thus raised to 3,480 square miles.

Further extensions are also in contemplation, and it is expected that at the end of 1878-79 there will be 4,406 square miles of Government forest in Bengal. Of this area 823 square miles are situated in the Lower Himalayas and the adjoining Terai and Dooars, and the rest in Chittagong, the Sunderbuns, Chota Nagpore, and Shahabad. The open Sunderbun forests, which are waste land belonging to Government, will also be declared a protected forest and placed under the Forest Department. During the year good progress was made in the demarcation of boundaries, the opening out of roads, and the extension of plantations. Forest charges which had become unmanageably large were divided into ten small areas, such as one executive officer can properly administer. The financial working of the Forest Department was thoroughly successful. The revenue was nearly doubled, and the cash surplus rose from Rs. 10,712 to Rs. 1,71,251. It is hoped that the surplus will be still greater in future years. A detailed account of the administration of each of the forest divisions is given in the body of the report.

The most important manufactures of Bengal are the tea ^{Manufactures and} and indigo industries, the jute and cotton ^{mines.} mills on the banks of the Hooghly and at Serajgunge in Puhna, the iron manufactures of Howrah, the paper mills of Bally, the silk filatures of Rajshahye and Midnapore, and the salt manufactures of Orissa. Much detailed information about all of these has been given in former reports, and they are further noticed in the body of the present report.

The outturn of the indigo crop for 1877-78 is estimated at 1,10,000 maunds. The exports to foreign countries amounted to ₹35,297 maunds, the value of which is estimated at Rs. 3,04,37,068. Tea is cultivated to a greater or less

extent in the Cooch Behar, Dacca, Chittagong, and Chota Nagpore Divisions, but the bulk of the tea which finds its way into the Calcutta market comes from Assam. The total imports into Calcutta amounted to 36,083,306lb, while the exports to foreign countries amounted to 33,186,878lb during the year.

The cinchona plantation, begun in British Sikkim in 1862, now covers about 2,200 acres. For three years it has yielded a considerable annual outturn of bark, and the crop of the past year amounted to about 340,000lb. The object of Government in maintaining these plantations is to supply its own hospitals and the people at large with a cheap and efficient remedy in cases of malarious fever, and an experienced chemist was some years ago appointed to be Government Quinologist. The preparation of cinchona bark which on the advice of this officer it has been decided to issue is a whitish powder composed of the alkaloids naturally existing in the bark. This substance, which has been named cinchona febrifuge, has been extensively tried by medical officers and others. The early experiments with it in the Calcutta hospitals and the Burdwan district were entirely favourable, and led to its being issued to a large number of officers for trial throughout the presidency. Some difference of opinion at first existed as to the value of the new remedy; but increased experience led to its being largely substituted for the quinine hitherto supplied to Government institutions. In this manner about 3,000lb have been used in Government hospitals and dispensaries during the year, and a very considerable pecuniary saving has resulted. The medicine has also met with acceptance from medical officers in Bombay, while the sale of more than 2,000lb of it at the Botanical Garden Office may be taken as an indication of the estimation in which it is already held by the general public. The amount of febrifuge thus disposed of during the year has yielded a revenue which exceeds the expenditure by about Rs. 11,000, and to this must be added the large saving arising from the diminished issue of quinine. The plantation is now in a position to meet a very much larger demand for febrifuge, and as this arises, the financial results will improve in a corresponding degree.

The sea-borne trade shows an increase under imports and exports of merchandise and treasure in the foreign as well as in the coasting

Trade.

trade, except in the case of exports of treasure to foreign ports, in which there was a decrease of 56 per cent. The imports of merchandise in the foreign trade rose in value from Rs. 16,69,38,128 in 1876-77 to Rs. 19,38,54,456 in the past year, being an increase of more than two crores and a half. The import of treasure also increased to nearly five crores, against two crores and three-fifths in 1876-77. This was due to the cessation of the Secretary of State's drawings in September 1877 and to the demand for silver on account of the grain trade and the approach of the jute and indigo season. In the coasting trade the imports of merchandise rose from two crores and a quarter to two crores and three-quarters, and those of treasure from fifty-seven lakhs to ninety-six lakhs. Taking foreign and coasting trade together, and including treasure, the imports into Bengal rose from Rs. 22,14,71,982 to Rs. 28,10,07,874. The exports of merchandise in the foreign trade increased in value from Rs. 26,44,66,482 to Rs. 31,06,87,132, while the exports of treasure fell from Rs. 10,38,308 to Rs. 4,47,096. In the coasting trade the exports of merchandise rose from nine crores and a half to thirteen crores, and the exports of treasure from Rs. 2,15,87,290 to Rs. 2,66,35,774. Including both foreign and coasting trade, the total value of the exports from Bengal rose from Rs. 38,40,87,871 to Rs. 47,00,02,162. Adding together the total of both import and export trade, the value of the entire trade of Bengal rose from Rs. 60,55,59,853 in 1876-77 to Rs. 75,10,10,036 in 1877-78, an increase of nearly fifteen crores, or 24 per cent., against a rise of nine crores, or 17.43 per cent., in the previous year. These figures are inclusive of treasure, but do not include Government transactions. There was not only an abundant crop in Bengal in 1878, but the prices of food were abnormally high in consequence of the demand for grain in Madras and Bombay, so that the agricultural classes enjoyed exceptional prosperity and trade was unusually active. The increase of exports to foreign ports affected almost all the more important staples of country produce, and produced a material development in the trade of the subordinate ports in Orissa and Chittagong.

The system of registration of internal trade which was introduced throughout Bengal in 1875 had been found to be needlessly cumbrous and expensive, while the results obtained from it were of doubtful accuracy, and did not lead to any trustworthy conclusions as to

Trade of Calcutta Town.

the movements of trade in the interior of the country. Several of the outlying stations were therefore abolished, and the entire system was revised with the object of securing correct registration of the traffic entering and leaving the town of Calcutta, the trade on the Nuddea rivers and the Midnapore and Orissa canals, and the general traffic of Behar. The registration of railway traffic has been arranged for under the direction of the Government of India. Interprovincial registration is also kept up between Bengal, the North-West Provinces, the Central Provinces, Madras, and Assam, and stations are maintained for recording the frontier trade with Nepal, Sikkim, and Bhootan. Full details of the results of these measures are given in the body of the report.

The total expenditure on public works in Bengal amounted to Rs. 1,09,69,803, and was distributed as follows:—

				Rs.
Imperial ...	{	Guaranteed railways ...	...	1,98,904
		Military and other services	...	4,51,570
		Irrigation ...	...	36,00,053
Provincial		...	...	28,93,147
District road works		...	...	31,66,743
Local funds		...	...	80,943
Total direct expenditure on works from public works funds				1,03,92,357*
Contributions	• •	...	...	2,36,800
Successive outlay	...	...	...	3,36,429
Local loans	...	...	...	4,127
Total				6,77,446
Grand Total				1,09,69,803

Excluding Irrigation and Guaranteed Railways, which are noticed below, the expenditure on imperial works amounted to Rs. 4,52,570, of which Rs. 42,662 were spent on military works and Rs. 4,09,908 on civil buildings. Owing to the completion of the large imperial buildings at Calcutta, the operations of the brick factory at Akra have been reduced, and the factory is to be made over to the local Government on the condition that future imperial requirements will be complied with.

Provincial works consist of those works the outlay on which would have been met from imperial resources before the system of provincial services was introduced, and of certain undertakings met from special funds. The expenditure

* Inclusive of Rs. 3,151 expended in England on account of stores.

on provincial works during the year was Rs. 28,93,147, distributed as follows:—

	Rs.
Civil buildings	11,10,439
Communications	16,81,278
Miscellaneous public improvements	1,01,430

In addition to the above, the following sums were expended from contributions received from various sources:—

	Rs.
Education	15,903
Medical	30,738
Ecclesiastical (churches)	630
Land revenue	50
Excise	59
Monuments and antiquities	2,480
Miscellaneous or general	1,386
Communications	877
Miscellaneous public improvements	45,330
Establishment	370
Total	<u>97,823</u>

A detailed account of the expenditure on provincial buildings will be found in the sections on roads, canals, and other public works in the body of the report.

The total outlay on district roads amounted to Rs. 31,66,743, of which Rs. 74,977, or less than 2½ per cent., were expended by officers of the Public Works Department. These works consisted chiefly of ordinary repairs to roads and metalling and bridging the existing main lines of communication. Measures have also been taken to ensure that the district road committees shall expend a fair proportion of their funds on village communications, as the improvement of village roads brings home to the people the benefits which they derive from the levy of the road cess.

Arrangements have been made to give to passed students of the Civil Engineering Department of the Presidency College a course of gratuitous practical instruction in order to train them for engineering appointments under district committees. The experiment has thus far worked well, and several young men who had thus qualified in practical work have obtained employment under district road committees.

The capital outlay on irrigation works, which has been steadily diminishing for some years past, was again lower in 1877-78 than in the previous year, and amounted to Rs. 24,08,949, of which amount 17 lakhs were expended on the Sone Canals, five lakhs in Orissa, and two lakhs in Midnapore. The head

works and main canals of all three schemes are for the most part finished, and only the distributaries remain to be completed.

• There is nothing of special interest to record under the head of construction. Fair progress was made with the works in hand during the year, and the schemes are gradually approaching completion within the limits of the sanctioned estimates. The omission in the Orissa estimates of proper provision for distribution from the main canals specially attracted the notice of Government, and estimates for about nine lakhs, an amount only 4 per cent. upon the original sanction for the scheme, have been submitted to the Government of India for additional distributaries, which will increase the irrigable area by 100,000 acres, or 55 per cent. This is still far from the limit of the extension of distributaries required to give full effect to the large outlay which has taken place upon the great canals, and further estimates for similar works for another 150,000 acres will be submitted as soon as they can be prepared. Until these distributaries have been constructed it is impossible to speak of the Orissa works as a failure, for though the expensive head works were constructed at an enormous outlay, which contemplated an irrigation system which has now been entirely abandoned, a very much larger return over the outlay would be received if it were not that there are now large and expensive canals lying absolutely unused for the want of distributaries; while there can no longer be any sort of doubt that the people would gladly take and pay for the water if they could get it. There has been a great demand for water in the lands on which the distributaries have been constructed, and leases have been readily entered into by the cultivators for five years.

Two new irrigation schemes of somewhat novel financial character were introduced during the year: one for the Sarun district, on the basis of a local guarantee of the interest on the capital outlay; the other in Hooghly, on the basis of local contributions to the capital amount. The former consists of a canal by which water from the Gunduk will be thrown into the principal water-courses of the district, from whence it will be distributed at the cost of the people themselves for irrigation and manufacturing purposes. The estimated cost is five lakhs, $4\frac{1}{2}$ per cent. on which has been guaranteed by a few of the principal planters and zemindars, the Government remaining responsible for the cost of

maintenance and recouping itself from the proceeds of the sale of all surplus water for irrigation, the guarantors having priority of right to a supply. Some progress was made with some of the supply cuts during the year, and it is hoped that the works will be finished before the rains of 1879.

The Hooghly scheme is estimated to cost five lakhs, of which amount a lakh has already been promised by the zemindars. Its primary object is the supply of good drinking-water to the numerous villages lying along the old deserted spill channels of the Damooda, but there will be a considerable surplus for use in irrigation.

An important project was submitted to the Government of India during the year for a navigable canal to connect the existing tidal canal in Hidgellee with the estuary of the Brahmince and the Cuttack system of canals. Its cost will be about 35 lakhs, and it will form part of a larger scheme for connecting the whole of the tidal channels of Orissa, the Chilka lake, and the Ganjam district of the Madras presidency with Calcutta. The total length of navigation from the Hooghly to Ganjam will be 400 miles. The cost is roughly estimated at 75 lakhs, 20 lakhs of which have already been spent on the Hidgellee canal; and until such a canal is constructed Orissa will never be safe from such calamities as that of 1866.

No navigation scheme has yet been brought forward in Bengal of similar importance, or calculated to yield such returns, both direct or indirect.

The year was notable for a marked extension of irrigation in Cuttack and on the Sone, the area in the former district having risen to 98,000 acres, or three times the highest amount ever attained before, and in the Sone from 13,000 acres in 1876-77 to 288,000 acres.

In both districts the rainfall was deficient, markedly so in the Sone tract. In Cuttack, however, it is evident that this cause gave merely the final impulse to a movement which had gradually been advancing there in favour of irrigation; and the fact that the whole of the large area there irrigated has since been taken up for irrigation under five-year leases shows that the advance is permanent, and that irrigation, when available, will henceforth become an integral part of the agricultural system of Orissa.

On the Sone the experience of a few years will yet be required before any safe conclusions can be drawn as to the extent to which irrigation is likely to develop, but

the experience of 1877-78, and it may be added, that of the khurreef season of the following year, is decidedly encouraging.

In Midnapore the area irrigated was small, but all under five-year leases, and has since largely extended. The success of the five-year leases so far is a very hopeful feature in the prospects of irrigation in Bengal.

Three-year leases on very favourable terms have since been offered in the Sonc districts.

The receipts from navigation continue steadily to increase on all the canals, and in Midnapore and Orissa were largely in advance of previous years, chiefly owing to the great export of grains to the famine districts. The total receipts from irrigation, navigation, and miscellaneous in 1877 amounted to Rs. 4,94,000, against Rs. 3,29,000 in 1876-77.

The working expenses amounted to Rs. 7,02,000, the result being a deficit of Rs. 2,08,000, which was, however, Rs. 60,000 less than the deficit of the previous year. A still more important reduction is expected in 1878-79.

It seems not improbable that drainage schemes may yet develop into very considerable proportions in Lower Bengal, and form an important part of the operations of the Irrigation Branch of the Public Works Department. The success of the Dancooni works has led to the projection of other schemes of greater magnitude, which are now under consideration, and which, if they should be carried out, will benefit 100,000 acres of land now either seriously injured or wholly waste for want of proper drainage and protection from inundation.

With regard to the financial prospects of irrigation generally in Bengal, it may be said that though somewhat improved by the experience of the year under review, they can never be brilliant. There is no hope that any one of the three great schemes now approaching completion can pay the charges for interest and working expenses within any reasonable period. The deficit under both heads, which is now a charge upon the provincial revenues, amounted to Rs. 22,11,355 in 1877-78. Besides which there was a further charge for interest on minor projects amounting to Rs. 80,443, making a total charge to this Government of Rs. 22,47,798. Should 1878-79 prove a favourable year for irrigation, it is probable that the corresponding amount for that year will be less by two lakhs.

‘It is evident, however, that the indirect value of the canals to the country is very great, and there is a reasonable probability that before many years this may become so marked as to be accepted as a fair equivalent for the burden thrown upon the country in the shape of direct taxation to cover the annual deficit.

In May 1877 the Northern Bengal, Tirhoot, Nulhattee, and Calcutta and South-Eastern State

Railways.

Railways were made over to the control of the Government of Bengal, in pursuance of the policy by which the local Government becomes responsible to the imperial Government for interest on the capital expended on reproductive works. The Northern Bengal State Railway, which runs with only a break at the crossing of the Ganges from Poradah on the Eastern Bengal Railway to Julpigoree, was formally opened in January 1878. An extension from Julpigoree to Silligoree, near the foot of the Darjeeling hills, was opened for goods traffic in June 1878. The railway serves some of the richest districts in Bengal, and is expected to carry a heavy traffic in tobacco, grain, seeds, jute, and tea. The Tirhoot Railway starts from the Barh station of the East Indian Railway, with a short line to the south bank of the Ganges. The river is crossed by a steam ferry, and the line is continued on the north bank, a distance of 52 miles, to Mozufferpore, with a shorter branch of 23 miles to Durbhunga. The Nulhattee Railway runs for $27\frac{1}{4}$ miles from the station of Nulhattee, on the East Indian Railway, to Azimgunge, on the Bhagiruthee, nearly opposite to Moorshedabad. The Calcutta and South-Eastern Railway was constructed under Government guarantee to serve the auxiliary port of Canning on the Mutlah river. As the traffic did not come up to the expectations which had been formed of it, and scarcely paid the working expenses, the line, which is 28 miles in length, was surrendered to Government in 1868. Since then the traffic has shown signs of improvement, and the receipts now exceed the working expenses. The general management of the State Railways has been thoroughly successful during the year. Full details of their working are given in the body of the report.

In many of the postal divisions the carrying arrangements were generally revised during the year. Several imperial lines were closed and others were converted into zemindari lines. Although the amount of railway mileage was largely increased by the

opening of the Northern Bengal State Railway, the postal mileage of all kinds was less by $707\frac{1}{2}$ miles than in the previous year. There was an increase of 72 post-offices and 41 rural messengers. More than 29 millions of letters, newspapers, packets, and parcels, were despatched through the imperial Post-office in Bengal in 1877-78, being an increase of 4 per cent. on the number despatched in 1876-77. No difficulty was experienced in working the zemindari postal lines in connection with the imperial postal arrangements. Rules were passed for the purpose of defining the duties and relations of the postal authorities and giving effect to the provisions of Act VIII (B.C.) of 1862. The administrative divisions adopted by the Telegraph Department render it impossible to furnish any return of the working of the telegraphs in Bengal alone. A line of telegraph was established in Bengal between Dacca and Naraingunge with the object of assisting the growing jute trade between those places.

Owing to the frequent famines which have occurred in different provinces of India since 1866, the Government of India decided that it was necessary to secure in prosperous times a substantial surplus of revenue over expenditure in order to meet the occasional expenditure on famine. It was considered advisable to throw on each local Government, so far as practicable, the burden of protecting its own people and of meeting the cost of relief required in time of famine. To enable the local Government to carry out the above objects the Government of India, before the commencement of the year under review, sanctioned an extension of the scheme of provincial services—(1) by transferring to provincial control certain additional branches of improvable revenue, (2) by adding to the number of services under provincial management, and (3) by holding the local Government responsible for the cost incurred and to be incurred in future for the construction of canals and railways of provincial utility. To this latter end the Government of Bengal was required to make a contribution on account of interest on capital expenditure on productive public works constructed for the benefit of the province. In order to secure the presence of funds for this purpose, the Bengal Legislative Council passed the Public Works Cess Act II of 1877, which came into operation in June 1877.

In order further to provide funds to meet the heavy expenditure which might at any time be rendered necessary

by relief measures in any province, it was decided that Bengal should contribute for this purpose a sum, which for the year 1878-79 was fixed at Rs. 21,15,000; and as it would have been unfair to throw additional taxation on the agricultural classes, who bear the burden of the local public works cess, the further sum required was directed to be raised from the commercial and industrial classes by means of a license tax on trades, dealings, and industries. This led to the passing of Act I (B.C.) of 1878, the Bengal License Act, which came into force towards the close of February 1878.

The results of the extension of the Provincial Services scheme have so far been most satisfactory. The receipts under the chief heads of revenue have largely increased, while unnecessary expenditure has been cut down, and the money thus saved has been devoted to improving those branches of the administration which most required an increased outlay, to public works of general or local utility, to the advance of education, the reform of prisons, and other similar objects, which had for some years past had to stand over for want of funds.

The number of estates on the revenue roll in 1877-78 rose from 142,528 to 146,380, mainly on account of the numerous partitions of estates which took place in Behar. The current demand amounted to Rs. 3,68,95,967 as compared with Rs. 3,67,37,241 in the previous year. The general results of the collections were slightly less favourable than in the previous year, being 94·34 of the total demand; current and arrear, against 94·81 per cent. in 1876-77, and the unrealized balance due at the close of the year amounted to Rs. 21,19,436, as against Rs. 19,19,294. The number of estates and shares of estates liable to sale for default in payment of revenue rose from 4,825 to 8,077, and the number actually sold from 496 to 907. This increase was partly accounted for by the pressure upon small proprietors in some of the eastern districts owing to losses from the cyclone and bad crops. Looking to the large number of defaults it is satisfactory to note that the actual sales were so few—a proof that the law is worked with extreme leniency and consideration. The number of partition cases disposed of was 584, against 638 in 1876-77. There were only 40 cases of redemption of land revenue, all in petty holdings in Calcutta and the suburbs. The registration of all possessory titles in land rendered necessary by Act VII (B.C.) of 1876 has been going on during the year. In Dacca

and Chittagong the work was attended with considerable difficulty owing to the subdivision of properties into minute shares, and in Orissa the operations have been retarded by the number of rent-free tenures. Elsewhere, however, satisfactory progress was made on the whole, and the benefits of the Act are beginning to be very generally appreciated.

The net customs duty collected in Bengal rose during 1877-78 from Rs. 4,46,67,644 to Rs. 3,69,78,285, being an increase of

more than 23 lakhs.. Eight lakhs out of this increase came from the salt revenue, and about 15 lakhs from the duty levied upon other imports. By far the larger proportion of this was due to larger imports of cotton yarn and piece-goods, although the imports of liquors and metals also contributed materially to the rise of duty. Under the head of exports the increase of revenue was less marked, amounting to Rs. 52,617 only. There was a rise in the revenue derived from the export duty on indigo, and a fall in the revenue from shell-lac.

The total area under opium cultivation in the Behar and Benares Opium Agencies together

during 1876-77 was 889,622 beeghas, which yielded the large outturn of 1,25,255 maunds of opium. In the Benares Agency there was some tendency on the part of the cultivators to sow in excess of their engagements, and the clause in the license which legalised such excess sowing was consequently cancelled. The number of chests of opium sold, with the receipts, charges, and net revenue of the Opium Department during the last two years, are exhibited below:—

OFFICIAL YEARS.	NUMBER OF CHESTS SOLD.			AMOUNT REALIZED.		Abkaree and miscellaneous receipts.	Total receipts.	Total charges.	Net revenue.
	Behar.	Benares.	Total.	Behar.	Benares.				
	No.	No.	No.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1876-77 ...	26,359	20,890	47,249	3,13,21,966	2,56,75,500	17,37,581	5,17,38,281	2,85,98,289	3,33,39,992
1877-78 ...	26,215	23,253	49,500	3,39,91,600	2,87,91,223	15,67,460	5,42,60,285	2,61,73,997	3,77,86,288

Excise is one of the principal branches of revenue which were transferred to provincial management from the commencement of the year.

The revenue derived from it amounted to 68 $\frac{2}{3}$ lakhs, as against 62 $\frac{1}{2}$ lakhs in 1876-77, while there was a decrease in the actual cost of collection as well as in the ratio borne by the cost of collection to receipts. This remarkable improvement in an important branch of provincial revenue was due partly to the careful administration of the department by the Board of Revenue, and partly to the substitution of the outstill for the central distillery system in tracts to which the latter was inapplicable. The raising of the duty on ganja, and the enhanced price of opium, also contributed to produce an increase of revenue. At the same time the restrictions, both direct and indirect, on the consumption of intoxicating drugs and liquors were made more stringent. (A.C.C.)

The receipts from salt rose from Rs. 2,56,90,656 to Rs. 2,64,55,073, being an increase of Rs. 7,64,417. The clearances of salt for consumption stood thus :—

	Quantity.	Duty.
	Mds.	Rs.
Sales of imported salt from shipboard ...	54,59,877	1,69,59,194
Ditto ditto from bond ...	26,51,799	82,78,811
Sales of excise salt ...	3,70,686	10,03,065
Total ...	84,82,362	2,62,41,070

As the general prices of the year were high, the increased consumption of salt throughout Bengal indicated by the clearance returns bears strong testimony to the prosperity of the agricultural classes during 1877-78. From returns of internal trade which are now compiled under the orders of Government it appears that the most marked increase was in Behar, where the average consumption of the population rose to nearly the same standard as that of Bengal generally, being upwards of 10lb per head, after making all allowances for export beyond the province. This seems to show that even in Behar, where the condition of the cultivators is comparatively impoverished, the profits arising from the sale of their crops at abnormal rates have to some extent reached the agricultural classes and remained with them. The manufacture of excise salt declined from 4,07,975 maunds to 1,70,986 maunds, owing to the inability of the Orissa manufacturers to compete with Ganjam salt; but this is only a temporary depression, and the relief given by raising the duty on Ganjam salt and

paying the cost of preventive establishment at Pooree promises to revive the trade.

The revenue from stamps was also transferred to provincial control on the condition that provincial revenues should pay to the Government of India on account of "Stamps" and "Law and Justice" for the year 1877-78 the sum of Rs. 1,05,75,000, and thereafter an increase of $2\frac{3}{4}$ lakhs of rupees every year for four years more. The increase of revenue during the year was very great. The total receipts amounted to Rs. 1,06,31,662, which exceeds the aggregate sum required by the Imperial Government under both "Stamps" and "Law and Justice" by Rs. 56,662, and under "Stamps proper" by Rs. 7,81,062. The greater portion of the increase was due to the operations under the Land Registration Act; but apart from this there was a general increase under all heads, attributable to the greater activity of trade during the year.

The Road Cess Act, X (B.C.) of 1871, was in force in all the districts of Bengal except the District road cess. Chittagong Hill Tracts, Sonthal Pergunahs, and Singbhoom. The rate of cess was not the same in all districts. In seven districts it was half the maximum rate fixed by law, in two districts it was three-fourths, and in the remaining 28 districts the maximum rate of half an anna in the rupee was levied. The demand on account of land cess for the cess year ending 30th September 1877 was Rs. 28,65,506, and the collections amounted to Rs. 25,04,911. The total demand on account of the cess on houses was Rs. 1,94,104, and the collections were Rs. 1,40,677. The house cess is not, however, suited to the circumstances of the country, and its abolition is contemplated; in the meantime all collections on account of it have been suspended.

The Provincial Public Works Cess Act, II (B.C.) of 1877, came into force in June 1877 in all the districts in which the District Road Cess Act was in operation. The rate of taxation was half an anna in the rupee. The contribution to be paid to the Government of India on account of interest on capital expenditure on extraordinary public works in the province was originally estimated to be Rs. 25,75,000, but was subsequently fixed at Rs. 20,00,000 for the year 1877-78. The receipts under the Act up to 31st March 1878 amounted to Rs. 21,05,038.

The Bengal License Tax Act (I of 1878) came into force towards the close of the year, and in 1877-78 merely the preliminary arrangements for working it were made. It is still too early to attempt to state the results of its operation.

A bill was under consideration during the year for imposing compulsory rates on all lands irrigated and protected by Government works, but there appeared to be reasons for believing that the agriculturists in Behar were really beginning to appreciate thoroughly the advantages of an assured supply of water, and under these circumstances it was not considered expedient to press the compulsory system in Behar. In Orissa the field survey, which must necessarily precede the levy of a compulsory rate on irrigable lands, had not been completed, and the bill was therefore dropped after some progress had been made in the discussion of its provisions. In the meantime nearly all the water at present available has been taken up in Midnapore and Orissa on five-year leases.

The registration of births and deaths is improving in accuracy, but great progress in this respect is still needed before the vital statistics which are produced yearly can be safely relied on. It is at present an open question what proportion of the increased registration is due to greater care and attention on the part of the subordinate police officers whose duty it is to report deaths, and what proportion is due to deliberate falsification of returns with the object of showing a probable death-rate.

The system of registration in selected areas, which had been largely extended, has been abandoned as giving results but little better than those attained in the general circles. The registration of births is confined to the larger municipalities. It is intended for the present to concentrate attention on perfecting the system of registration of deaths.

In consequence of the scarcity in Oudh and the North-Western Provinces, and the active operations of the emigration agents, the number of emigrants despatched to the colonies rose from 7,734 to 18,488. Nine emigration agencies were at work, employing 461 licensed recruiters. The larger proportion of the emigrants came from the North-Western Provinces, Oudh, and Behar. Colonial emigration has never been popular in Bengal proper, and there was a positive decrease in the

number of Bengal emigrants last year. Thirty-seven sailing ships and one steamer were employed in the conveyance of emigrants, the average number conveyed in each vessel being 480. As many as 2,544 emigrants returned from the colonies in 1877-78, bringing with them acknowledged savings in money amounting to Rs. 4,72,926, or an average of Rs. 185 per head. Many also possessed valuable jewellery.

Inland emigration also received a remarkable impetus during 1877-78. The number of persons registered as willing to emigrate amounted to 36,209, of whom 27,879 arrived at their destination. There were 26 licensed contractors at work, employing 780 recruiters. Several large Calcutta firms who are interested in tea estates have established depôts under the supervision of Europeans, and it is hoped that this may have a good effect in reducing the malpractices which prevail in the recruitment of emigrants. Efforts were made to reduce the mortality among the coolies during the voyage from Goalundo to Assam, but no great success was attained. There is, however, a fair prospect that the main stream of emigration will be diverted from the river route to the Northern Bengal State Railway. This will convey emigrants from Calcutta to Rungpore, whence they will march to Dhubri, and there embark for Assam. Complete arrangements have been made for providing shelter and medical treatment for emigrants on the line of road from Rungpore to Dhubri.

The total number of patients treated in the hospitals and dispensaries of Bengal was 1,158,816, against 1,142,303 in 1876. The increase was chiefly remarkable in the medical institutions of the town of Calcutta. The attention of Government was early in the year directed to the unsatisfactory financial condition of the Sealdah Pauper Hospital. The investigations of a committee specially appointed to examine the subject disclosed the most lamentable mismanagement and absence of control. It was clearly shown that there had been extravagance and peculation under every head, and it was found necessary, after full consideration of the subject, to effect a complete change in the hospital staff. About the same time circumstances came to light which pointed to waste of public funds in some departments of the General Hospital. There could no longer be any doubt that much mismanagement had been allowed to grow up in some of the Calcutta hospitals, and it was decided that the whole question of

Medical relief.

hospital administration should be carefully considered by a special committee, in order that, while abuses were remedied, a definite system should be adopted, which would ensure uniformity in practice and efficiency in control. This committee has been engaged during the current year on the task entrusted to it. The Superintendents of the different Hospitals have meanwhile exerted themselves loyally to give effect to the views of Government, and much public money has been saved without any real sacrifice of efficiency or of the comfort of the sick.

It is intended that the committee should extend its inquiries to the other departments of medical administration, to medical schools, lunatic asylums, and vaccination. Many lunatics, who under the standing orders of Government should never have been admitted to asylums, were made over to the custody of their friends, and inquiries regarding others are still in progress. These measures, and the greater care now exercised by administrative officers in seeking admission for harmless lunatics, have resulted in a considerable decrease in the general asylum population. It was found possible to abolish the Moydapore asylum, and the practicability of further reduction is still under consideration. The circle system of vaccination was extended to ten new districts during the year. This measure was considered to be preferable to the continuance of the practice of granting small sums here and there, for the encouragement of vaccination by ex-inoculators, to such Civil Surgeons as might interest themselves in the subject. Calcutta was visited by an outbreak of small-pox in October, and during the current year the mortality has been greater than in any year since 1865. The Superintendent-General of Vaccination at the Presidency attributed the continuance of the epidemic during the hot season to the unusual humidity which prevailed.

Much suffering and great mortality were caused in all parts of the country by fever. One of the chief causes of this fatal prevalence

Sanitation.

of fever in the districts of the delta is believed to be the excessive humidity of the soil, caused or aggravated by obstruction of drainage. Except in a few cases, in which some obstruction is perhaps caused by roads, railroads, and embankments, the defective drainage is chiefly due to natural causes, such as the silting up, or obstruction in other ways, of water-courses through which the surplus water of the country was formerly discharged. The special

attention of all officers of Government has been drawn to the injurious consequences arising from defective drainage, and grants-in-aid have been promised with a view to help in carrying out any really useful schemes to improve the drainage or to provide pure drinking-water in places where it is needed. Associated labour of a purely voluntary nature for the public good is not generally to be expected in the present day from the native population. The sufferers, therefore, cannot as a rule be expected to initiate measures for helping themselves in this matter, and what is required to be done must be done wholly or in part by Government or by public bodies.

The number of deaths registered during 1877 was 1,077,601, showing a death-rate of 17.96 per thousand of population, as against 983,400, or a death-rate of 16.40, in the previous year.

The improved financial position of the Government in 1877-78 enabled it to raise the educational grant from Rs. 24,67,236 to Rs. 25,10,940.

This stimulated private liberality to such an extent that the departmental receipts advanced from Rs. 4,71,814 to Rs. 5,19,803. The net Government expenditure consequently amounted to Rs. 20,00,058, being an increase of only about Rs. 10,000 over the net expenditure of the previous year. At the close of the year the number of schools had increased from 21,478 to 26,218, and the number of pupils from 589,351 to 641,400. Primary schools rose from 12,272, with 302,550 pupils, to 16,042, with 360,322 pupils; this being due, not to an absolute increase in the number of such schools, but to the fact that many schools already existing, but hitherto, unaided, have been brought under Government supervision. At the primary scholarship examination 12,985 candidates from 4,474 schools competed, and 5,647 from 2,996 schools passed; while the number of pupils in primary schools in Bengal who, could read, write, and understand easy sentences in their mother tongue advanced during the year from 103,000 to 153,000.

The area of secondary instruction was reduced during the year by the abolition as a separate class of the lower or intermediate English schools, on the ground that they encouraged a defective system of teaching, both English and the vernacular. Lower vernacular schools increased from 1,501 to 1,604, middle vernacular from 1,045 to 1,087, and middle English from 511 to 572. The higher English

schools show a decline in numbers from 180 to 176, in consequence of the separation of European and Eurasian education. The number of pupils, however, in Government schools alone increased by 640. For the Entrance examination of December 1877, 176 schools sent up 1,991 candidates, of whom 844 passed.

The total number of colleges teaching to the standard of the B.A. examination is now seven, and there are five second grade colleges teaching to the First Arts standard. The number of pupils in all colleges rose during the year from 1,792 to 2,003, being nearly double the number of students in 1874. For the first examination in Arts 613 candidates appeared and 184 passed, for the B.A. examination 163 candidates appeared and 51 passed, while for the M.A. examination there were 28 candidates, of whom 15 passed. The efficiency of all the colleges was seriously affected by casualties among the superior officers of the graded service.

In every branch of special instruction except that of law the number of students has seriously declined. In the Medical College the number of pupils fell from 176 to 145, in the Engineer Department from 124 to 87, and in the School of Art from 119 to 89. The numbers of the vernacular survey school remained constant at 160. The scope of the artisan school at Dohree has been enlarged, and the standard raised, in the hope of enabling employers of skilled labour to secure in India trained engineers and foremen, whom they have hitherto been obliged to import at great expense from Europe. The number of normal schools was reduced during the year from 31 to 24, and subsequent reductions have brought the number down to 17. This is sufficient for the requirements of the backward parts of the province, where the natural supply of qualified teachers, as tested by the primary scholarship examinations, is found to be insufficient.

The number of female schools rose from 464 with 10,492 pupils to 519 with 11,964 pupils; but the number of girls in boys' schools decreased from 9,794 to 9,623. Altogether there were 21,587 girls under instruction, against 20,286 in the previous year.

There were 36 aided schools for Europeans and Eurasians with 3,389 pupils, and 12 unaided schools submitted returns showing 1,166 pupils.

The number of Mahomedan pupils increased from 106,590 to 111,645. Several new scholarships were given from the Mohsin Fund to enable Mahomedan students to continue their English studies in the Calcutta Madrasa or at other Government institutions. The total expenditure from this endowment on Mahomedan education is now Rs. 56,532.

The Vernacular Press Act, which was passed on the 14th March, 1878, has already had a beneficial influence upon the tone of the native press, and thoughtful discussion is, it is hoped, gradually taking the place of the disloyal, scurrilous, and defamatory articles of the past. The tone of the English newspapers under native management is, in the majority of instances, all that could be desired. They contain much keen, and often unfavourable, criticism of Government measures, but are generally free from gross personalities, and are thoroughly loyal in feeling and tendency. There was a considerable increase in the number of books in English published during the year, while the number of vernacular publications remained much about the same as in the preceding year.

Early in the year it came to notice that certain Burmese gentlemen, who had been deputed by the king of Burmah to repair the inclosure of the Buddha Tree and Temple at Buddha Gaya, were working in such a manner as to injure rather than improve the buildings. Dr. Rajendra Lala Mitra was therefore requested to visit the place and report on the work done, and the manner in which the operations should be controlled. It appeared from his report that large portions of the building, of great historical interest, had been virtually swept away by the demolitions and excavations which had gone on. Arrangements have accordingly been made to complete the repairs of the temple under the supervision of the District Engineer of Gya, working in communication with Dr. Mitra and the Commissioner of Patna.

The total number of specimens received in the Economic Museum during 1877-78 was 2,959, and at the close of the year the Museum contained 12,460 specimens illustrating most of the economic products of Bengal. A collection of indigenous dye-stuffs, accompanied by samples of dyed fabrics, was forwarded to the Secretary of State.

The ecclesiastical establishment in Bengal paid, or partly paid, by Government was as follows:—

Ecclesiastical.

Lord Bishop of Calcutta	...	...	...	1
Archdeacon of Calcutta and Commissary to the Lord Bishop	...	...	...	1
Domestic Chaplain to the Lord Bishop	...	...	...	1
Registrar of the Diocese and Secretary to the Lord Bishop	...	...	...	1
Chaplains of the Church of England	...	...	...	18
Ditto Ditto of Scotland	...	...	...	1
Ministers of the Additional Clergy Society	...	...	...	10
Priests of the Roman Catholic Church, including the Vicar Apostolic of Western Bengal	...	...	...	6

The scales of establishment for all Government cemeteries in Bengal were revised, and reductions effected in the cost of church establishments. Eight marriages were solemnized under the Brahmo Marriage Act, being five less than in the preceding year.

With a view to give the local Government a direct financial interest in reducing the consumption of stationery, the Government of India made an additional assignment of Rs. 4,48,000 to provincial revenues from the beginning of 1877-78, on the understanding that provincial revenues would bear all charges on account of stationery. Some saving was inaugurated during the year by promoting the use of country-made instead of English paper, by a reduction in the size of forms and registers, as well as in other ways.

Stationery.

The printing arrangements of the Government were entirely remodelled during 1877-78 with the object of reducing the heavy expenditure which Government incurs for printing, and of applying convict labour to all branches of printing work more efficiently than has hitherto been possible. The entire material and plant of the Alipore Jail Press were transferred to the Presidency Jail, machines and presses being also sent from the Secretariat Press, which has thus been relieved of a large portion of its mechanical work. Presses were subsequently sent from the Public Works Department, and it was arranged to print the *Behar Gazette* by jail labour. There are now in the jail 61 presses and 13 machines besides those used for proof purposes, and the supervision of the whole has been placed under one officer, styled "Superintendent of Government Printing in Bengal," who carries on the work of the Jail Press in close connection with that of the Secretariat Press, so that the one establishment supplements and assists the other. The arrangement has so far

Printing.

worked successfully, and it is hoped that it may result in a saving of about one lakh of rupees per annum.

The attention of Government was specially drawn during the year to the abuses which had been allowed to grow up in connection with indigo cultivation in Behar. A report submitted by the Commissioner of Patna conclusively shewed that the system, as it existed, involved an amount of lawlessness and oppression, principally in the shape of extorted agreements to cultivate and of seizure of ploughs and cattle, which could not be tolerated. It was clear that although there was no such manifestation of widespread discontent as to render the appointment of a commission necessary, as had at one time been proposed, there was certainly much discontent manifest enough to local officers, and of such a nature as to require very close watching and very strong officers to deal with it.

On receipt of this report some of the leading planters as well as officials of Behar were consulted through the Commissioner. It was an object to do nothing which would unduly excite the mind of the ryots, and to avoid any such agitation as might lead to breaches of contract and general embitterment of relations between planters and ryots; and as some of the leading planters declared themselves sensible of the necessity of reform and willing to assist in the work, and for this purpose undertook the establishment of a Planters' Association, any action on the part of Government was postponed and the matter was entrusted to their hands. This body shewed a sincere desire to place the relations between planters and ryots on a more satisfactory footing, and drew up a series of rules for the guidance of the members of the Association. These rules embody very important reforms, and the action thus far taken by the Association is thoroughly satisfactory.

The most important reform, however, is some measure for giving the ryot greater security of tenure and consequent freedom of action. This is a subject which can only be adequately dealt with by legislation, and is beyond the scope of the measures which lie within the power of the Planters' Association. A scheme for amending the rent law is under consideration, so as to provide in Behar some way of securing the ryots' rights of occupancy more effectually than is at present possible.

REPORT

ON THE

ADMINISTRATION OF BENGAL, 1877-78.

REPORT FOR THE YEAR 1877-78.

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ADMINISTRATION OF BENGAL.

1877-78

I.—PHYSICAL AND. POLITICAL GEOGRAPHY.

Changes of Administration.

It was the practice in previous years to frame the present chapter so as to form a general introduction to the body of the report; and with this object the narrative was not confined to occurrences falling within the official year, or to matters strictly included under the title 'Changes of Administration,' but usually embraced all events deserving special notice up to the date of the actual compilation of the report. This practice, which involved a departure from the standing orders prescribing the form of the Administration Report, will now be abandoned, and the subject-matter of this chapter will be limited to events which occurred within the year, and which can properly be considered changes in the administrative provincial machinery of Bengal. Much matter which formerly was brought in to swell this chapter will be found elsewhere under more appropriate headings; and one or two subjects belonging to the year, which were erroneously noticed in last year's report, are again referred to here, so as to make this really a complete record of 1877-78.

Sir Ashley Eden was Lieutenant-Governor of Bengal throughout the year 1877-78, having been formally confirmed in the Lieutenant-Governorship with effect from the 1st May 1877. After leaving Darjeeling in July 1877, the Lieutenant-Governor visited Mymensingh, Dacca, and Tipperah, and afterwards held a Durbar in Calcutta, at which the sunnuks of the titles conferred by His Excellency the Viceroy on certain native noblemen and gentlemen were formally handed over to them. Towards the end of August the Lieutenant-Governor visited Kishnaghur, Berhampore, Rajmehal, and Bhagulpore. Nearly the whole of November was occupied by a tour through Behar, during which the opportunity was taken of holding a Durbar at Sonapore for the purpose of conferring the sunnuks of titles upon the gentlemen

Lieutenant-Governor's
appointment and tours.

who were selected by Sir Richard Temple as deserving of special honor in connection with the famine of 1874.

In the end of February the Lieutenant-Governor left Calcutta for Cuttack, where he spent several days. Chittagong was visited next, and he returned to Calcutta about the middle of March. Durbars, or formal receptions, were held both at Chittagong and Cuttack.

It was explained in last year's report that the increase of work involved in the extension of the system of provincial finance rendered it necessary to relieve the Judicial and Revenue Secretaries to the Government of Bengal of all questions connected with finance, accounts, and taxation, and to place these branches of the administration in the hands of a separate Secretary, who should give his whole time to such subjects, and should also supervise the collection and collation of trade statistics—a duty which had previously been performed by the Junior Secretary. Proposals were accordingly submitted to the Government of India for the appointment of a Financial Secretary and an additional Under-Secretary, the post of Junior Secretary being abolished and the salary of the Junior Secretary to the Board of Revenue being at the same time somewhat reduced. The Government of India sanctioned these proposals as an experimental measure for a period of two years, and the arrangement has since been working with a considerable increase of efficiency. There are now three Secretaries to the Government of Bengal, in charge of the Judicial, the Revenue, and the Financial Departments respectively. The Judicial and Revenue Secretaries are each assisted by an Under-Secretary, and the Financial Secretary by an Assistant Secretary. The appointment of Assistant Secretary was conferred on a Native gentleman.

The transfer to the Government of Bengal of the control over the State Railways in the Lower Provinces, with the responsibility for the interest on the capital expended, rendered it necessary to strengthen the Public Works Secretariat by appointing the Director of State Railways a Joint Secretary to the Government of Bengal in that department.

It has at length been decided to bring together the various Secretariats of the Bengal Government, and the more important departments with which the Government is in continual communication, into a single set of offices in Writers' Buildings. The necessary accommodation will be obtained by adding blocks at right angles to the rear of the existing building. The works are already in progress, and it is hoped that they will be sufficiently advanced for the Government to complete the concentration of its office establishments towards the end of 1879.

In reviewing the Administration Report of the Political Agency of Hill Tipperah for 1876-77, attention was drawn to the unimportant character of the work of that administrative charge. The local officers who were consulted considered the work of the Agent to be in fact a sinecure, and a proposal was accordingly submitted to the Government of India for the abolition of the Agency and the appointment of the Magistrate

of Tipperah as *ex-officio* Political Agent, an experienced Native Deputy Magistrate being posted at Agurtollah, the head-quarters of the Rajah of Hill Tipperah, as Assistant Political Agent. This has subsequently been sanctioned.

On the recommendation of the Lieutenant-Governor Koomar Rameshwara Singh, younger brother of the Maharajah of Durbhunga, was appointed by the Government of India, under the provisions of section 6 of the Statute 33, Victoria, chapter 3, to be an Assistant Magistrate and Collector on probation, and subject to passing the usual departmental examinations.

The important changes introduced into the constitution of the Indian Marine. Marine service of India were briefly referred to in last year's report. The questions of general policy involved in those changes have been discussed in the introductory chapter, and a more detailed account is given in the Marine section of Part III. It will be sufficient to observe here that the chief alterations affecting provincial administration which were actually brought into effect within the year were the withdrawal of the Dockyard from the management of the local Government and the transfer of certain duties hitherto discharged by the Master Attendant to the Superintendent of Marine, an officer directly subordinate to the Government of India, who is also intended to act as adviser to the local Government in all matters of Marine administration. Up to June 1877 the whole of the Orissa ports were under one Conservator, whose head-quarters were at False Point. This arrangement was not well suited to the growing requirements of these ports, and when a vacancy occurred in the appointment by the death of Captain Harris, the opportunity was taken to appoint a Harbour Master for the port of False Point and a separate officer for the charge of Chandbally and Balasore. In accordance with the Resolution of the Government of India introducing the reorganization of the Marine, the designation of Harbour Master was in both cases changed to that of Port Officer.

It had long been felt that the control of the medical expenditure of Bengal and the management of the numerous medical institutions of the province, together with the superintendence of vaccine operations over an area which increased year by year, were duties which required the undivided time and attention of an experienced departmental chief, and could no longer be properly carried on by the Surgeon-General of the Indian Medical Service, an officer under the Military Department of the Government of India, who could only dispose of Bengal matters during the intervals of his other duties. The control of the provincial medical work was accordingly withdrawn from the hands of the Surgeon-General of the Indian Medical Department. One of the three appointments of Deputy Surgeon-General was abolished, and a separate officer, wholly subordinate to the local Government, was appointed Surgeon-General for Bengal. This involved an addition of Rs. 450 to the pay of the officer selected as provincial Surgeon-General; but the increased check and control

of expenditure ensured by the arrangement made it worth the while of the local Government to accept the charge. The new arrangement worked well during the past year. It was also proposed to amalgamate the appointments of Inspector-General of Jails and Sanitary Commissioner, at the same time appointing a second officer to be Deputy Inspector-General of Jails and Deputy Sanitary Commissioner. One of these officers, it was intended, would always be inspecting jails, towns, and stations, while the other looked after the office work of both offices at head-quarters. This proposal was held in abeyance pending receipt of the orders of the Secretary of State on the re-organization of the medical administrative staff in India; but the Government of India consented to the appointment of the Inspector-General of Jails and the Sanitary Commissioner to be *ex-officio* Inspectors of Civil Hospitals and Dispensaries in the Lower Provinces.

Relations with Tributary States and Frontier Affairs.

THE principal event of the year was the marriage of the Rajah to the daughter of Baboo Keshub Chunder Sen, the leader of the Brahmo Somaj. The marriage was

COOCH BEHAR.

Marriage of the Rajah.

celebrated on the 6th March 1878, at the Rajbari in Cooch Behar, in the presence of a large assemblage composed of natives and Europeans. Some difficulty was experienced in reconciling the Hindoo and Brahmo ceremonial forms; for, as the Rajah is not a Brahmo, it was necessary to the legality of the marriage that the rites should be in accordance with the Hindoo religion. The ordinary Hindoo ceremony was modified, so as to meet the wishes of Baboo Keshub Chunder Sen; but the fact that Brahmins consented to perform it shows that the marriage was recognized by the Hindoos as orthodox. Shortly after his marriage the Rajah left India on a visit to Europe, and he is expected to return to the country in March 1879. Suitable arrangements have been made for the residence of the Rani with her father, and for her education during the Rajah's absence.

The sanctioned budget estimates for the year showed a deficit of Rs. 2,18,635, due to extraordinary expenditure on account of public works and the Rajah's marriage.

Finance.

The actual income of the state during the year amounted to Rs. 12,67,472, while the expenditure was Rs. 13,46,424. The actual deficit was therefore only Rs. 78,952. The expenditure under almost every head was less than the amount entered in the budget estimate, and great care and economy were exercised in every department. The sanctioned estimate for the expenses of the Rajah's marriage was Rs. 1,60,000, of which Rs. 1,55,064 were expended during the year, while a few items remained outstanding. The liabilities of the state at the close of the year amounted to Rs. 85,079, against Rs. 69,200 at the end of 1876-77, and the assets to Rs. 24,52,979, against Rs. 25,18,000.

The current demand for the year on account of land revenue was Rs. 9,69,301, against Rs. 9,16,188 in 1876-77 and an average of Rs. 6,46,300 for the five years

Land

immediately preceding. The total of the current and arrear demand was Rs. 13,93,198, against Rs. 14,19,317 in 1876-77. The amount collected during the year was Rs. 9,10,622, against Rs. 9,74,809 in the previous year. Of the total increase in the demand Rs. 44,704 were due to the new progressive settlement; and under this head there will be a yearly increase till the maximum jumma is reached in the year

1880-81. There was an increased demand of Rs. 4,950, owing to the resumption of the *mehal* of Kumar Krista Narain and others, to whom fixed monthly allowances are now paid, as they were found incapable of managing their estates properly. The only other important item in the increased demand was a sum of Rs. 6,215, attributable to the settlement of Syrut *Mehals* and the transfer of a few *mehals* from debutter to *mál*. Owing to the decrease in the collections the outstanding balance amounted to Rs. 4,48,156, against Rs. 4,23,102 of the previous year. Of the total balance, Rs. 2,39,996 were on account of the current demand, while nearly two lakhs were collected on account of arrear demand. In the absence of any arrear demand the amount collected would nearly have satisfied the demand for the current year. In order to enable the *jotedars* to clear their accounts, a succession of bumper harvests is required, whereas the past three years were all somewhat unfavourable. In the Cooch Behar state there are no rich *zemindars*, holding extensive estates and enjoying large profits, who can pay the revenue in bad years, even when they fail to collect rents from the *ryots*. The *jotedars* generally depend solely on the year's outturn, and the succession of unfavourable harvests has necessarily told upon the collections. Moreover, the last kist fell due only four days before the close of the year. In the Sudder division, comprising *pergunnahs* Cooch Behar and Toofanganj, the balance due at the close of the year was 42 per cent. of the total demand.

The great deficiency in the rainfall of June and the first half of July not only affected injuriously the outturn of the early rice, but also seriously retarded the transplantation of the late crop. The rains of August, September, and October were also somewhat unfavourable, and the outturn of neither the early nor the late rice crop was above 10 annas. The heavy showers of September injured the tobacco seedlings in many places, while they delayed the preparation of the fields for the mustard crop. The outturn of both the tobacco and mustard crops was in consequence below the average, and the *china* and *kaon* crops were also unsatisfactory. The only crop that was successful was jute, and the cultivation of, and trade in, this staple are in the hands of comparatively few people. On the whole, the year was a bad one both for cultivators and others; the latter suffered from the high prices caused by the demand to meet the distress in Southern India, while the former required the greater portion of the produce for their own consumption, and very few of them could profit by the rise in prices. Cattle-disease was also very prevalent, and tended to impoverish the people by reducing their means of cultivation.

The entire excise revenue of the past year was Rs. 48,820, against Rs. 45,702 in 1876-77. The excess over the average collections of the past five years was Rs. 8,547. The collection of duty on opium increased by Rs. 2,472, the increase being attributed to the fact that the rate has been raised in the neighbouring districts, and the people of Goalpara, Rungpore, and Julpigoree, therefore find it advantageous to purchase the drug from the Cooch Behar shops. There was an increase of Rs. 514 in the duty levied on ganja, and of Rs. 256 in license fees for its sale. By

increasing the license fees the price of the drug was raised and its consumption discouraged, and the increase in the collections of duty is explained by the fact that last year the ganja obtainable in Cooch Behar was of inferior quality, and purchasers resorted to the shops in Rungpore and Julpigoree. There was a slight decrease in the duty levied on country spirit, and the license fees diminished by Rs. 255.

The stamp revenue amounted during the year to Rs. 90,928, against Rs. 93,984 in 1876-77 and Rs. 75,746 in 1875-76. The total number of deeds registered was 4,926, against 4,231 during the preceding year, and the amount of fees collected was Rs. 3,517, against Rs. 3,344. Bonds and other obligations for payment of money, the registration of which is optional, are not generally registered. The total expenditure on registration was Rs. 2,442, being Rs. 176 in excess of the expenditure of 1876-77.

Stamps.—Registration.

The number of rent suits instituted during the year was 2,105, against 2,044 in the previous year and 1,570 in 1875-76. The increase in the number of suits in the past two years is ascribed to the pressure put by the jotedars on their under-tenants through fear of the Cooch Behar Limitation Act, which was originally to come into force on the 8th June 1877. The operation of the Act was, however, postponed for a year, and, as regards old cases, it has been further postponed to the end of the current official year. The total number of regular civil suits instituted during the year was 3,143, against 3,086 in 1876-77 and 2,516 in 1875-76. The value of the suits was Rs. 3,23,532, against Rs. 2,44,529 in the previous year.

Civil and Criminal Justice.

The total number of cognizable and non-cognizable cases reported during the year was 2,892, against 3,103 in the preceding year and 2,879 in 1875-76. The cognizable cases fell from 1,644 to 1,571, and the non-cognizable cases from 1,465 to 1,321. The number of serious offences against the person decreased from 131 to 107, and of serious offences against property from 46 to 42. The prevailing crimes were petty theft, house-trespass, and assault. There was an increase in the number of reported cases of theft, which rose to 983 from 904 in the previous year, the number of true cases rising from 746 to 838. This increase was attributed to the growth of a strong body of chowkidars, who report petty cases in which the aggrieved party would think it too much trouble to prosecute. The establishment of this force of auxiliary police, consisting of 870 men, was one of the most noteworthy features of the year. All the chowkidars were appointed on the application of the inhabitants of the different talooks, who voluntarily came forward and offered to pay the salaries of the men if the State would give them the position of chowkidars. At first there were only a few applications; but when the experiment was found to be successful, the number of applications increased so rapidly that by the end of the present year every talook will probably have its chowkidars. The percentage of persons convicted to the total number tried was 70.2, as compared with 68.43 in the previous year. The percentage of property recovered to property stolen was 17, against 22 in 1876-77.

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The average number of prisoners in confinement in the sudder jail was 231, the same as the average of the previous year. The average number sick was 10.04, against 8.12 in 1876-77 and 12.15 in 1875-76. The death-rate was 2.2 per cent. of mean population, against 7.4 in 1876-77. The gross earnings of the prisoners during the year were Rs. 10,989, against Rs. 8,894 in the previous year; the net earnings were Rs. 9,206, against Rs. 6,214, showing an increase of Rs. 2,993. The gross cost of each prisoner fell from Rs. 80-14-7 in 1876-77 to Rs. 72-11-10 in 1877-78.

Medical.

The number of persons, who received medical treatment at the charitable dispensaries was 15,525, against 12,143 in the preceding year. There was no epidemic in any part of the state, but fever was very prevalent. Of the common intermittent type of fever there were more than 1,200 cases in excess of the number in 1876-77. The Sudder and Mekligunge sub-divisions appear to have suffered more than the rest of the state. The total number of persons vaccinated was 19,559, against 12,012 in the previous year and 7,825 in 1875-76. Nearly all the operations were verified either by the Civil Surgeon or the Superintendent. The ratio per cent. of successful cases in primary vaccination was 93.2, and in secondary vaccination 90. Altogether the progress made in vaccination in the past few years has been most satisfactory, and it is clear that the prejudice of the people against the operations has been overcome. Five years ago the number of operations performed in the year was 4,449, and the average cost of each case was 4 annas 5 pies. The number of operations last year was 19,559, and the average cost of each case one anna and half a pie.

During the year under review the number of schools increased from 322 to 360, the number of pupils from 8,745 to 9,832, and the average daily attendance from 7,112 to 7,756.

Education.

Calculating, according to the ordinary method, the number of children of an age fit to attend school, it appears that 22 per cent. attended school during the past year. The results of the examinations at which the pupils competed were very satisfactory. Two boys passed the University Entrance Examination and one of them won a junior scholarship of the first grade. At the Vernacular Scholarship Examination Cooch Behar passed 20 students, and at the Primary Scholarship Examination 215 Cooch Beharis passed, against 74 in the previous year. Among the successful candidates were two girls, whose parents are stated to be orthodox Hindus. Considerable progress was made in female education during the year. On the 31st March 1877 there were 28 girls' schools with 439 pupils; at the end of the year there were 43 girls' schools with a roll-call of 560, of whom 374 were Hindus and 186 Muhammadans. Of the 43 girls' schools 14 are private institutions receiving no aid from the State. The total expenditure on education during the year was Rs. 79,246, against Rs. 74,516 in 1876-77, the amount contributed from the funds of the Raj being Rs. 53,849, against Rs. 49,526.

The sanitation of the town of Cooch Behar was attended to throughout the year. Some new roads were opened, the growth of jungle was kept down,

Public works.

tanks were excavated, and hollows filled up. The new court-house for the Deputy Commissioner and the Dewan was completed during the year. It was designed, and built entirely by Baboo Govind Chunder Roy, the Superintendent of Public Works, and cost altogether Rs. 1,00,000. The dispensary and thana, which were in course of construction in 1876-77, were finished, a building for the artisans' school was built, and the Jenkins' school building was completed up to plinth. Seventy-two miles of new road were made during the year, and the old roads were repaired wherever repairs were needed. All unfinished wooden culverts on the emigration road were finished, and three new bridges, each 103 feet long, were constructed over rivers. The very exceptionally heavy floods of the present year have shown that the waterway under the culverts and smaller bridges on this and other roads was insufficient, and many of the bridges have been carried away. Not a single river bridge was, however, seriously injured by the flood, although the rainfall in June and the first half of July amounted to 85 inches, and more than half the area of the state was inundated.

At the close of the year 1876 the Commissioner of the Rajshaliye and Cooch Behar Division received intelligence

BHOOTAN.

Internal disturbances.

that some of the Bhootan officers had revolted against the authority of the Deb Rajah. Numerous and conflicting accounts of engagements and sieges were received during the first six months of 1877, and it was only in November last that it was definitely ascertained that the Deb Rajah had defeated the insurgents and reduced the forts of which they had taken possession. The Poonakha Jungpen and the Paro Penlow, with about 125 followers, escaped to British territory, and were disarmed as soon as they crossed the frontier. The Deb Rajah applied to the local Government for the surrender of the fugitives, and the leader of the insurgent party also requested the intervention of Government between the Poonakha Jungpen and the Deb Guapo. Both applications were refused in accordance with the fixed policy of Government not to interfere in any way in the internal affairs of Bhootan.

The Deputy Commissioner of Darjeeling, accompanied by the

SIKKIM.

Visit of the Deputy
Commissioner of Dar-
jeeling to the Maharajah.

Under-Secretary in the Political Department, visited Sikkim in October 1877 and presented to the Maharajah one of the banners given to ruling Chiefs in commemoration of the assumption by the Queen of the title of 'Empress of India.' At the same time the medal and ring sent for the Maharajah by the Prince of Wales on the occasion of his visit to India were presented.

The past three years have all been unfavorable to the Chittagong

CHITTAGONG HILL
TRACTS.

Rainfall.—Crops.

Hill Tracts. In 1875-76 a considerable portion of the crop was destroyed by floods. The cyclone of 1876 destroyed about one-fourth of the standing crop, and in the past year the unusually heavy rains in July, August, and September caused the Kurnaphuli river to overflow its banks and destroy a large portion of the paddy crops on the lowlands. The rice crop was on the whole estimated as an eight-anna one, though in some parts of the district the outturn was only half

that amount. The cotton crop was also much damaged by the rain, and the yield was poor, except in the Sungoo sub-division, where an average outturn was obtained. The total rainfall, as gauged at Rungamtee, was 126.10 inches, as compared with 114.35 in 1876-77. In consequence of the partial failure of the local rice crop a very large amount had to be imported for the consumption of the people. The imports of husked rice were more than 50 per cent. in excess of those in the previous year, and prices were very high, causing considerable distress. In order to relieve this distress, which has been most felt since the close of the year, sanction has been given to the grant of advances to the hill people on the usual conditions of repayment in money, rice, or labour after the cutting of the joom crops. In 1875-76 the average price of husked rice was 14 seers 3 chittacks per rupee; in 1876-77 it was 12 seers 10½ chittacks; and last year it rose to 9 seers 15 chittacks. The distress of the past three years has caused considerable numbers to emigrate to Hill Tipperah, the regulation district of Chittagong, and Akyab. Only some 38 families, all from the district of Chittagong, are reported to have immigrated to, and settled in, the Hill Tracts during the year.

The trade returns compare very unfavorably with those of 1876-77.

Trade.	<i>Import.</i>		<i>Export.</i>	
	1876-77.		1877-78.	
	Mds.	s. c.	Mds.	s. c.
Paddy ...	12,828	30 0	12,045	29 0
Husked rice ...	27,212	10 0	43,725	37 12
Tobacco ...	2,200	20 0	1,317	30 10
Salt ...	10,033	20 0	7,222	1 8
Dried fish ...	5,129	20 0	5,693	1 8
Cotton ...	78,253	20 0	69,756	22 12
Mustard-seed ...	3,662	30 0	8,025	21 8
India-rubber ...	381	0 0	1,123	25 3
Gurjun oil ...	511	0 0	567	0 4
Til-seed ...	4,879	10 0	1,335	38 0

There was an increase of 16,483 maunds in the amount of rice imported, while there was a large decrease in the imports of tobacco and salt, which the people could not always afford to purchase. As compared also with the returns of 1875-76, the imports of tobacco and salt were deficient. The exports of cotton and til-seed fell off considerably, but the loss on the latter crop was compensated for by the increase in the exports of mustard-seed, of which the crop was much more successful than in 1876-77. The trade in India-rubber carried on with the independent tribes to the east of the frontier has revived, as the Kookies, who bring in the rubber to Demagiri, understand now that they will be protected against any misconduct on the part of the traders. The amount of India-rubber imported in 1877-78 was 1,123 maunds 25 seers, against 381 maunds in 1876-77 and 1,001 maunds in 1875-76.

The annual Durbar held at Demagiri for the purpose of consolidating our relations with the Lushai chiefs beyond the border took place from the 17th to the 19th February. Invitations were sent to all the Chiefs of the Syloos, Thanglawas, and Howlongs, except the Howlong Chief Sapoiya, who was in disgrace in consequence of having murdered the sons of a supposed wizard, to whose sorcery the late Chief Rutton Poiya had, when dying, attributed his death. A messenger was deputed to inquire

into the cause of the absence of the Howlongs, and they replied that apprehension of raids by the Shindoos compelled them to stay at home. Sixteen Chiefs of the Syloo and Thanglowa clans attended the Durbar, and, but for the absence of the Howlongs, the meeting passed off successfully.

There was peace along the whole of the frontier during the year, and no raid or attempt at a raid took place.
 State of the frontier. The scheme for improving and extending the frontier patrolling lines and connecting them on the south with the Arracan posts and on the north with those of Hill Tipperah progressed during the year. Definite arrangements have now been made for a regular system of communication between the frontier guards of the Chittagong Hill Tracts and Arracan. The arrangements for regular communication between the frontier posts of Hill Tipperah and the Hill Tracts are not yet complete, as the site to which the Sirthay outpost must be moved in order to facilitate communication with the Hill Tipperah post on the Sardeng Hill has still to be determined.

The gross strength of the frontier police force at the close of the year was 468 men. The total sanctioned force is 653 men, of whom 113 are employed as civil police. There were thus 72 vacancies in the battalion, and these have since the end of the year been filled up by a batch of Goorkhas enlisted in Chumparun. The discipline and conduct of the force were satisfactory, and only 15 punishments were inflicted. The cost of the Commissariat was Rs. 33,928, against Rs. 27,767 in 1876-77 and Rs. 34,624 in 1875-76. The increase, as compared with the cost in 1876-77, was almost entirely under the head of rations, and was accounted for by the high prices of the year.

There were 281 cognizable and non-cognizable cases reported during the year, against 167 in 1876-77. The number of persons actually brought before the criminal courts for inquiry or trial was 592, of whom 316 were convicted, 36 committed for trial, and 190 acquitted. Besides these there were 40 persons awaiting trial at the close of the year, and ten died, escaped, or were transferred before trial. Of the 506 persons whose cases were finally disposed of, 62·4 per cent. were convicted. Compared with the returns of the previous five years, it appears that offences against property have nearly doubled, and those against the person have increased nearly 40 per cent.; but the total amount of crime is still trifling in comparison with the area of the district, and not very great in comparison with the population. In civil litigation there was a satisfactory decrease as compared with the previous two years. The number of cases instituted during the year was 2,268. The total number of cases, including those pending from the previous year, was 2,479, against 3,065 in 1876-77 and 2,998 in 1875-76. The decrease of 565 in the number of miscellaneous cases was attributed by the Commissioner to the poverty of the people. The increase of 41 in the number of settlement cases was due to the settlement of grass and gurjun kholas. Only eight cases out of 2,299 disposed of were decided by arbitration.

The revenue demand for the year, excluding tolls on forest produce, and excluding also the large outstanding balance on account of the purchase of waste lands, was Rs. 39,616, against Rs. 33,912 in 1876-77, and the collections, including outstandings, Rs. 34,091, against Rs. 47,758. The excess in the collections of 1876-77 is more than accounted for by the larger amount realized out of the outstanding balance under the head of waste land sales. The collections on account of the 'house or joom tax' were Rs. 12,820, against Rs. 6,845 in 1876-77; but the main portion of the amount collected represented arrears of 1876-77. The demand under the head 'grass and gurjun kholas' was Rs. 14,941, against Rs. 10,575 in 1876-77; but the actual collections were less than half those of the previous year. Of the outstanding balance on account of waste land sales, the sum of Rs. 69,181 was written off during the year, and Rs. 42,766 since the close of the year. The net balance remaining to be collected is now only Rs. 10,561.

The administration of forest tolls remained with the Conservator of Forests during the year, but the whole question of how best to preserve the valuable timber trees of the Hill Tracts without depriving the people of one of their chief means of livelihood was fully inquired into and considered. There is no doubt that under the management of the Forest Department, and in consequence of the high rates of tolls imposed upon forest produce some few years back with the concurrence of the local civil authorities, the trade in forest produce between the Hill Tracts and the regulation district of Chittagong has fallen off to a serious extent, and that, owing to the distress caused by a succession of bad seasons, the practical stoppage of this trade has pressed very hardly upon the hillmen and others who formerly engaged in it. Tolls upon timber, bamboos, grass, and other forest produce have been long levied in the Hill Tracts. Up to 1860 they were exacted by the Hill Chiefs as a return for the protection afforded by them to the wood-cutters from the plains, and since that year they have remained a recognized branch of the district income. Since the close of the year orders have been passed transferring the administration of forest tolls to the Deputy Commissioner, under whom they were formerly collected, and sanctioning the adoption of the old mode of assessment—an *ad valorem* rate, instead of a scale of tolls fixed according to the cubic contents of the timber and the quantities of minor produce. This latter scale was never understood or liked by the hill people, and they were always liable to be cheated by the toll collectors. The *ad valorem* rate has for the present been fixed at 10 per cent. For the preservation of a supply of timber sufficient for the requirements of the regulation district of Chittagong and the neighbourhood certain tracts of lands have been selected and constituted reserved forests. These reserved forests, the limits of which have not yet been finally settled, will be entirely under the management of the Conservator of Forests.

No advances were made during the year in furtherance of plough cultivation, and the general distress of the people has during the past few years stood in the way

Revenue.

Forest tolls.—Reserved forests.

Plough cultivation.

of extending the measures previously adopted for opening out lands for the plough. Still many of those who have received advances are yet cultivating with the plough, and the prospects of their crops are good. During the previous two years those who kept to the plough obtained bumper crops, while their neighbours who joined secured very little owing to unfavourable seasons. The benefits of plough cultivation have thus been brought prominently before the people, and it is reported that six of the headmen of the Chukma clan, who had previously endeavoured to dissuade their ryots from taking to the plough, have now applied for the settlement of a plot of land for plough cultivation.

Means of communication in the Hill Tracts are extremely limited, and a few roads in and about the principal stations are all that exist. The other roads are really foot-paths, and, owing to the small amount of traffic, they usually become overgrown with jungle grass and shrubs within a few months of being made. Including the balance of the preceding year, a sum of Rs. 27,769 was available for road-work, of which Rs. 14,978 was expended. Some progress was made in extending the road between Rungamattoo and Chittagong, but the work requires very heavy cutting, and will take a long time to complete.

Education in the Hill Tracts made no advance during the year. There were seven schools with 152 pupils, against eight schools with 153 pupils in 1876-77 and nine schools with 153 pupils in 1875-76. In the three primary schools there were altogether only 14 pupils. The number of out-door patients treated at the three hospitals at Rungamattoo, Demagiri, and Ruma was 2,417, against 1,600 in the previous year; the in-door patients were 1,941, against 1,437 in 1876-77.

The conduct of the Bohmong was much more satisfactory than last year, and, under the management of his cousin, his estate is gradually emerging from the debt and confusion into which it was brought by the late Bohmong. The finances of the Mong Rajah are said to be in a lamentable condition. He appears to have been too trustful of those around him, and has been robbed and cheated by those he thought his friends.

The most noticeable event of the year was the bestowal on the Chief of Hill Tipperah of the title of Maharajah as a personal distinction, in recognition of his loyalty and his earnest endeavour to improve the administration of his state. The Commissioner of Dacca will visit Agurtola at the beginning of the cold weather, in order to present to the Chief the sunnud and khillut, as well as a banner sent for his acceptance by the Government of India in commemoration of the assumption by the Queen of the imperial title.

The condition of the Maharajah's finances is unsatisfactory, and there appears to be little hope of improvement. After the payment of the Government revenue, some debts and fixed charges, and the expenses of management, only a small balance was last year available for expenditure at Agurtola, and the revenues derived from the state and the zemindary together were

insufficient to meet the expenditure. Since the accession of the present Maharajah in 1862 the state has suffered severely from the litigation caused by the peculiar customs of inheritance prevailing in the family of the Chief of Hill Tipperah. The right to the zemindary in British territory is decided by the British courts, and the decision has hitherto carried with it the succession to the Raj itself. Nabadip Chandra, the only surviving son of the late Rajah, was appointed *Karta* by the same deed by which the present Maharajah was appointed *Jubraj*, or heir to the state, and he now proposes to sue the latter for maintenance, and also for a declaration of his right to succeed to the zemindary in British territory. His claim to succeed to the zemindary and to the Raj is based on the alleged custom by which the Chief of Hill Tipperah can appoint the next three heirs to his property and state. Nabadip was appointed *Karta*, or third in succession, and, as the *Burra Thakur*, or second in succession appointed by the late Rajah, is dead, he claims the right to succeed after the death of the present Maharajah, who has, however, appointed two of his own sons to be *Jubraj* and *Burra Thakur*. The suit will necessarily cause the Maharajah great expenditure, which both he and the state can ill afford. It was, however, found impossible to effect a compromise, and the local Government could not with justice refuse its consent, under Section 433 of the Civil Procedure Code, to the institution by Nabadip Chandra of a suit for maintenance and a declaration of his right to succeed to the property in British territory.

There was a real advance in primary education during the year, and at its close there were 18 schools with 430 pupils, against 6 schools with 186 pupils at the end of the previous year. The school at Udeypore, and the Persian maktab and Sanskrit tole at Agurtola, all of which are old institutions, were revived, and the Political Agent, who inspected nearly all the schools in the state, reported that the only one in an unsatisfactory condition is the Anglo-vernacular school at Agurtola. This is, however, the most important of all the schools, as there nearly all the thakurs' sons who attend school at all are educated. The educational officers showed much zeal in promoting female education in the past year, and there are now four girls' schools, three of which were opened during the year. Of the 53 girls who attend the schools, all except five are Manipuris.

There was a deficiency of rainfall in the hills in the southern portion of the state during the critical period in the growth of the joom crops, and later on the crops of the plains suffered somewhat from floods. The outturn of food-crops was in consequence below the average, and the cotton crop was also not a good one.

The total revenue of the year was Rs. 1,99,549, against Rs. 1,82,632 in the previous year. The increase was due mainly to large receipts on account of the tolls levied on forest produce and the taxes on cotton and oilseed. In other branches of the revenue there was either a slight increase or a decrease. The land revenue, which amounted to Rs. 32,195, showed an increase of Rs. 774, due to the enhancement of rents in the

neighbourhood of Agurtola. The amount realized from the tax assessed on each family of the hill tribes was only Rs. 20,541, as compared with Rs. 25,415 for the previous year. The taxes on cotton and oil-seed, the most productive of all the sources of revenue in the state, yielded Rs. 55,625, against Rs. 46,371 in 1876-77. These taxes are, however, most burdensome to the hill people. Each maund of cotton is subject to a tax varying in different parts of the state from Re. 1-8 to Re. 1-14, and each maund of oil-seed to a tax of from 6 annas to 14 annas; while the severity of the tax itself is aggravated by the system under which it is collected by the farmers. The hill people, when bringing down their cotton and oil-seed to market, have, as a rule, no ready money for the payment of the taxes, and they are compelled to sell at low prices to the few traders located near the collecting stations. The most important farms are in the hands of two illiterate up-country men, and not only is the entire profit of the farmers the people's loss, but they are exposed to much unjust treatment at the hands of the farmers' servants, and are frequently forced to pay far more than according to the authorized rate of taxation. The revenue derived from the capture of elephants amounted to Rs. 20,391, being Rs. 2,324 less than in the previous year. None of the minor taxes on mustard-seed, parrots, sweetmeats, spinning-wheels, &c., have yet been abolished, though the Political Agent during the past year frequently addressed the Maharajah on the subject of their abolition.

The administration of justice was on the whole satisfactory. There were 31 cases of serious offences and 227 of minor offences against property, and 19 cases of serious offences and 226 of minor offences against the person. Besides these there were 110 miscellaneous cases, the majority of which consisted of contempts of the lawful authority of public servants, offences against public justice, and using abusive language. Of these 613 cases, 221 were rejected, dismissed, or compromised without trial; 338 cases were tried during the year, and in these 416 persons were convicted and 479 acquitted. The number of civil suits instituted was 239, against 284 in 1876-77 and 333 in 1875-76, and there were 54 cases pending at the beginning of the year. Of 250 cases disposed of during the year, 35 were dismissed on default of the plaintiff, 29 were withdrawn or compromised, 116 were decreed *ex parte* on the admission of the defendant, and only 70 were contested, with results in favour of the plaintiffs in 53 and of the defendants in 17 suits. There were 137 criminal and 47 civil cases in which British subjects were concerned.

Since the close of the year the Maharajah has issued a proclamation forbidding, under penalties to be awarded by the criminal courts, the sale, purchase, receiving, in pledge, or forcible detention as a slave, of any human being. All persons now actually in bondage are to have the option of leaving or staying with their masters, and in future no contract of service for a period exceeding three years will be recognized as binding. The Maharajah has also withdrawn the prohibition against the exportation of rice from Agurtola and its neighbourhood except under a special permit. This prohibition was unjust to the cultivators, as it tended to keep prices much lower than they would have been if the cultivators could have

Domestic slavery.

taken their produce to other markets; while, as soon as prices rose at Agurtola, imported rice competed with the local stocks and prevented the cultivators from compensating themselves for the previous low prices.

The orders of the Government of India regarding the military Frontier posts, posts which the Maharajah is to maintain on his north-eastern frontier were received during the year, and it has been decided that the Maharajah must maintain and garrison three stockades at Pherua Dharmanagore, Chirakuti near Koilashur, and Kamalpore. An old stockade exists at Chirakuti, one has been built at Kamalpore, and that for the defence of Pherua Dharmanagore will be completed in the next cold season. For the three posts a force of 105 men is to be maintained, with a reserve of 30 men, and 70 men of the force must be Goorkhas. Great difficulty has been experienced in recruiting Goorkhas, as the Maharajah's service, in which the pay is small and irregularly distributed, has few attractions for able-bodied Goorkhas, who can generally get employment elsewhere. It is necessary, however, that the stockades should be effectively garrisoned, and the Political Agent has been requested to insist on the proper discipline and punctual payment of the troops employed for the frontier posts. The Maharajah has recently purchased 200 muskets and sniders and a considerable stock of ammunition and clothing for the equipment of his force.

During the past year the meagre character of the work embraced in the administrative charge of the Political Agent attracted the attention of Government. The appointment of a European officer at Agurtola as Political Agent was rendered necessary by the fact that while Hill Tipperah was beyond control, the Chief used to involve Government in difficulties with the Kookies, who retaliated for his proceedings by raids into British territory. These complications no longer exist, the Kookie raids have of late years altogether ceased, and the experience of the past few years has shown that an officer in the position of the Political Agent of Hill Tipperah is incapable of doing any real good. The local Government accordingly recommended to the Government of India at the beginning of the present year that the separate office of Political Agent should be abolished; that the Magistrate of Tipperah should be appointed *ex-officio* Political Agent; and that a Native Deputy Magistrate should be stationed at Agurtola as Assistant Political Agent. These proposals have recently been approved of by the Government of India, and will be at once carried into effect.

The total demand of the Government estates of Banki and Ungool, Rs. 45,184, was collected in full, and a considerable portion of the demand for the current year was paid in advance. The revenues of these two estates are steadily improving, and the demand and collections for the past year were Rs. 1,431 above those of the previous year. Until the year 1876 it was the practice to pay into the treasury only the net revenue of these estates after deducting from the gross revenue all sanctioned and proposed charges on account of collection of revenue, maintenance of the estates, pensions, &c. This practice has now been discontinued, the gross revenues

TRIBUTARY REVENUES OF
ORISSA.
Revenue.

of the estates being credited, and the receipts and expenditure dealt with, under the ordinary system of audit and account for Government estates. From the collections and surplus in deposit on account of the Bamunghatty estate a sum of Rs. 40,000 was handed over to the Maharajah of Mohurbhunj, leaving still a surplus of nearly Rs. 20,000. The pergunnah of Bamunghatty, which was taken under Government management and placed in charge of the Deputy Commissioner of Singbhoom after the disturbances of 1866, has since been completely settled. The Maharajah's administration of the remainder of his territory has been so satisfactory that it is no longer necessary for Government to retain the management of Bamunghatty. The estate has therefore, since the close of the year, been restored to the Maharajah, subject to the conditions that his eldest brother shall live in Bamunghatty as his representative; that the sirdars of *peers* and the headmen of villages shall continue to be vested with police powers; that the present settlement of the estate shall continue without change for the existing term of ten years; that all the schools now open shall be maintained; and that all the roads that have been constructed shall be kept open. The total collections of the Dhenkenal state, which is under khas management owing to the minority of the young Rajah, were Rs. 55,846, and the balance at the beginning of the year was Rs. 28,438. After deducting the expenditure of the year there remained a balance of Rs. 8,079. The payments of tribute by all the states not under direct management have been punctually made.

There were 3,548 civil, revenue, and miscellaneous cases disposed of during the year, and 317 remained pending. The increase, as compared with 1876-77, is mainly due to the inclusion in the year's returns of all cases instituted in Dhenkenal, and partly also to a number of cases of disputed possession in the Runpore state. Of 3,650 cases instituted during the year Dhenkenal contributed 1,730, and Ungool, Banki, the Khondmals, and Bamunghatty together 1,399. The remaining cases entered in the returns include only those in which complaints were made to the Superintendent owing to the parties being dissatisfied with the Rajah's decisions. Of 521 such cases 302 were from the Runpore state. Nearly half the whole number of suits instituted were for debt. The criminal cases were generally of a petty nature. Out of 1,252 cases tried 453 were of assault and 258 of petty theft. There were four murders, nine cases of culpable homicide, and one dacoity during the year. One of the murders was reported by the police to be a case of human sacrifice, but on investigation by the Superintendent the report was proved to be incorrect. Three of the cases of culpable homicide were in the Khondmals, and all three arose out of drunken quarrels. In the only case of dacoity that occurred the offenders were detected and punished, and a portion of the stolen property was recovered.

The total number of schools in the Orissa Tributary Mehals is 115, and the number of pupils 3,048. In Ungool and Banki the schools are supported entirely from the revenues of the estates; in Bamunghatty half the expenditure on education was defrayed from the estate. In the Khondmals 16

Education.

schools with 582 pupils were maintained from the fund voluntarily raised by the people by taxing the grogshops at Rs. 5 each. The balance at the credit of the fund at the close of the year was Rs. 4,362. Both the Maharajahs of Keonjhur and Mohurbhunj take much interest in education, and the latter has, as stated above, agreed to maintain the 17 schools now open in Bahughatty.

The administration of all the estates under khas management was satisfactory. During the minority of the Rajah of Dhenkenal the state is under the management of the Dewan of the late Maharajah, Baboo Banamali Sing, who has also been appointed guardian of the minor Rajah. The Baboo is an able officer, of great local experience. The young Rajah's education is being conducted by an experienced native Deputy Inspector of Schools. The Khondmals were quietly and well managed by the tehsildar, Baboo Dinobundho Patnaik, who is reported to be very popular among the Khonds. A meeting was held at Bisipara on the 1st January 1878, under the presidency of the tehsildar, when about 8,000 Khond men and women assembled and resolved to commemorate the assumption by the Queen of the imperial title by holding an annual fair at Bisipara.

The administration of the Maharajahs of Keonjhur and Mohurbhunj was in all respects satisfactory. Keonjhur is now the best managed, most peaceable, prosperous, and contented of all the Tributary States. The debt due by the Maharajah to Government on account of the expenditure incurred in quelling the rebellion at the time of his accession to the *gudige* has been repaid in full, and the limited supervision previously exercised over the Maharajah's affairs has now been withdrawn. The Collector of Balasore, who is *ex-officio* Assistant Superintendent of the Tributary Mohals, visited Mohurbhunj in January, and during his stay in the killah not a single complaint was made to him. The reports as to the conduct of the Rajah of Talchere were unfavourable. The conduct of the Rajah of Baramba was not altogether satisfactory, but he is reported to be generally amenable to advice, and the appointment of a *punchayet* of headmen to assist the Rajah in the management of the killah has worked well. The Rajahs of Atgurrh, Nursingpore, Nayagurrh, and Pal Lehara appear to have administered their killahs with considerable ability and success. Great confusion and disorganization prevailed in Killah Runpore owing to the gross oppression and misconduct of the Rajah and his agents. The Superintendent of the Tributary Mehals visited the state during his cold weather tour and effected a reconciliation between the people and the Rajah, the latter entering into a formal agreement for the proper government in future of his state and people. The terms of the agreement have not, it is reported, been yet in any way infringed; the state is quiet, a summary settlement has been concluded, and arrangements for a detailed settlement are being made. The affairs of the Rajah of Duspulla were also found by the Superintendent to be in great disorder, and much discontent existed among the people. Detailed arrangements for the management of the state and for carrying out the pending settlement were made by the Superintendent during his visit.

The Rajah of Hindole died on the 18th July 1877, while on a pilgrimage to the temple of Juggernath. He left no son, and, according to the custom prevalent in the Cuttack Tributary Mehals, the succession of his younger brother was sanctioned by the Government of India. The present Rajah, who is now about 23 years of age, has not been well educated, and his half-brother, who is a good man of business and popular in the state, does all the work of administration. The people are reported to be happy and contented.

Mr. V. Taylor, the late Commissioner, made a long tour in five of the Tributary Mehals during the cold weather, and on this tour he contracted the fever from which he died on the 9th March 1878.

The tribute of each state was paid in full, and the conduct and general administration of the Rajahs was on the whole good. Mr. Taylor found the people of Bonai well nourished, well off, comfortable, and contented, looking up to and respecting the Rajah. There is considerable immigration to the Gangpore state from the Lohardugga district, and the Rajah offers every inducement to new settlers to clear the dense jungles in his state. No rent is taken for jungle land for the first ten years; but for fairly open ground rent at a moderate rate is charged after five years, and then after a year or two the land is measured and assessed at the prevailing rate. The Rajah appears to be quite alive to the fact that it is his interest to get as much land as possible brought under cultivation.

The rainfall during the year was insufficient, and there was a partial failure of crops in each of the states. There was in consequence some distress among the lower classes in Sirgoojah, Oodeypore, and Chang Bhukar, but in Bonai and Gangpore the crops were on the whole good. In both of these states the crops of Indian corn, jinowra, murwa, and urid were far above the average. In the petty states of Seraikellah and Kharsawan the rains set in and ended unusually early, so that although the cultivators obtained a good early rice crop the important rubber crop yielded a very poor return. The bhadoi crop was an average one.

Vaccination operations were carried on in Sirgoojah, Jushpore, and Gangpore by vaccinators, who charged two annas for each operation. There were seven vaccinators employed in Sirgoojah, one in Jushpore, and two in Gangpore. For Sirgoojah an Inspector was employed from January to April to supervise the work of the vaccinators.

Education is still extremely backward in the Tributary Mehals, but there was some progress during the year. In Jushpore there are now six schools, against only two last year; in Gangpore there are seven schools; in Bonai five; and there are three aided pathshalas in Seraikellah, and one vernacular model school in Kharsawan. No returns were received from Oodeypore, and the number of schools in Sirgoojah was the same as in the previous year. An unsuccessful attempt was made to open a school at Korea, but no attempt seems ever to have been made in Chang Bhukar. The Jushpore

and Bonai Chiefs take great interest in the spread of education, and at the schools in Bonaigurih girls and boys are taught together.

Sirgoojah, which is under the supervision of the Commissioner, is

Sirgoojah.

the only state regarding which any accurate particulars of income or expenditure can be given. The income was Rs. 31,990, against Rs. 32,758 in the previous year, and the expenditure Rs. 25,675, against Rs. 23,231. In order to enable the Maharajah to meet the expenditure incurred by his marriage, the rents of Tuppeh Tatapani, amounting to Rs. 598, were made over to him. Including this sum in the state revenues there was a decrease of Rs. 170 as compared with the income of the previous year. The increase in expenditure was due to the erection of new jail buildings and to the salary of a manager on Rs. 350 per month; but for these items there would have been a considerable decrease in the expenditure. Mr. Taylor, when on tour last cold weather, ascertained roughly the incomes of the Chiefs of five other states. They are—Jushpore, Rs. 14,500; Gangpore, Rs. 15,000; Bonai, Rs. 12,000; Seraikellah, Rs. 20,000; and Kharsawan, Rs. 7,000. The first three pay tributes of Rs. 775, Rs. 500, and Rs. 200 respectively; the last two are exempted from the payment of tribute.

The judicial work in the Commissioner's office during the year was Civil and criminal satisfactory, and the heavy arrears at the commencement of the year were cleared off. There were 40 miscellaneous original cases pending at the beginning of the year, and 59 were instituted during the year. At the close of the year only 19 cases were pending, and 10 of these were disposed of before the date of the Commissioner's report. There were 13 appeals pending before the Commissioner at the beginning of the year, and three were subsequently instituted. Of these 16 appeals the decisions in nine were confirmed and in five reversed, and two appeals were pending at the close of the year.

The criminal returns show that there were 895 cases and 1,326 persons arrested during the year, against 614 cases and 968 arrests in 1876-77. Of the total number of cases and persons arrested Seraikellah and Kharsawan contributed 136 cases and 218 persons, leaving 759 cases and 1,108 arrests in the seven Tributary Mehals. There were nine murders, three culpable homicides, and 22 dacoities, against five murders, six culpable homicides, and one dacoity in the previous year. Of the dacoities, six cases were in the state of Sirgoojah, and 14 cases in Bonai. Those in the former state are said to have been committed by the wild Korwas, who were in great distress in consequence of the short crops and high prices. Only 13 persons were convicted of being concerned in the six dacoities in Sirgoojah, but a number of persons of the Korwa class were sentenced by the Judicial Commissioner in cases of dacoity committed within the adjoining subdivision of Palamow. The great increase in crime, especially in dacoity, in Bonai is attributed partly to some convicts who escaped from the Hazareebagh Jail, and partly to one Kishna Sawant, who claims to be the hereditary Dewan of Bonai, but whom the Chief neither employs nor acknowledges. This man has been sentenced to four years' rigorous imprisonment, and is now in the Ranchi Jail.

In the seven Tributary States proper there were altogether 93 miscellaneous suits and 21 suits for execution of decrees pending at the beginning of the year; 227 miscellaneous suits and 28 suits for execution of decrees were instituted in the year, making a total of 320 miscellaneous suits and 49 suits for execution. Of these 202 miscellaneous cases and 31 suits for execution were disposed of during the year. In Seraikellah and Kharsawan, which are within the district of Singbhoom, 13 miscellaneous suits and 21 suits for execution of decrees were pending at the close of the previous year. The institutions were 107 in miscellaneous and 72 in execution cases, and of the former 102, and of the latter 72, were decided during the year.

The judicial administration of Gangpore was noticed unfavourably in last year's Administration Report, but the same indiscreet vigour again marked the Rajah's procedure. Out of 759 criminal cases and 1,108 persons arrested in the seven Tributary Mehals proper, 372 cases and 627 arrests were in the Gangpore state, the population of which is considerably less than one-fifth of the total population of the seven mehals. Of the 227 miscellaneous suits and 28 suits for execution of decrees in the seven Tributary Mehals, 130 miscellaneous and 20 execution cases were in Gangpore. The punishments usually inflicted by the Rajah are fines or short terms of imprisonment. During the year fines to the total amount of Rs. 3,566 were imposed on 412 persons belonging to the seven Tributary States, and in Gangpore alone the fines were Rs. 1,885, imposed on 277 persons. Of 250 admissions during the year to the jails of the seven Chiefs 116 were to the Gangpore Jail, and of 227 prisoners released 104 were from the Gangpore Jail.

With a view to the liquidation of the heavy debts incurred by the
THE NAWAB NAZIM OF BENGAL. Nawab Nazim, the Government of India in 1873 determined to take into its own hands the management of his personal stipend, amounting to Rs. 7,32,553 per annum. This decision was carried into effect, and the Nawab Nazim's Debts' Act, XVII of 1873, was passed by the Government of India for the purpose of protecting the Nawab Nazim and his property from legal processes, and for the settlement of his debts by a commission. His liabilities, as determined by the commission appointed under the Act, amounting to Rs. 16,85,461, were fully paid up by the end of the past year.

Under the provisions of the Act above mentioned the commis-
Nizamut state lands. sion determined what jewels and immovable property in the possession of the Nizamut are held by the Government of India for the purpose of upholding the dignity of the Nawab Nazim for the time being. The lands declared to be state property consist of 17 estates paying revenue direct to Government, 6 putni tenures, and 141 rent-free and rent-paying estates, situated in Moorshedabad and other districts, and having a total area of a little more than 175,148 beeghas, or 57,900 acres. They are at present not in the actual possession of the Nawab Nazim, having been made over by him without authority to members of his family and retainers for their maintenance. With the view of facilitating the identification of these estates in future, it was directed

that they should be surveyed, the title and interest of all parties in possession recorded, and permanent boundary marks erected where necessary. During the past year, however, very little progress could be made owing to the opposition of Ameer Sahib, third son of the Nawab Nazim, to the survey operations carried on in the villages held by him in pergunnah Gopinathpore in Moorshedabad. As any attempt to prepare a complete record of the rights of those in possession appeared likely to cause further difficulties, it was decided towards the close of the year that operations should be restricted to measuring the fields and ascertaining the actual possessor of each plot.

II.—ADMINISTRATION OF THE LAND.

Surveys.

THE detailed statistical information usually given under this head will be found in statements E1 and E2 of the Appendix. The survey year under report runs from 1st October 1876 to 30th September 1877.

There were seven professional parties at work during the year, as against six employed during the previous year.

Two of these were employed on a cadastral survey of the lands irrigable from the Sone Canals in Behar, one in making a similar survey of the Government estate of Khoordah in the Pooree district of Orissa, the fourth in surveying parts of the Midnapore district, a fifth on the survey of the dearahs in Furreedpore and Backergunge, and the other two in surveying private estates at the cost of those estates.

Their proceedings will be noticed in further detail in the order in which they have been arranged above.

As explained in previous reports, the Sone Canals irrigation survey was undertaken solely with a view of affording increased facilities for the better administration of the canal revenues. The survey is cadastral, on a scale of 32 inches to the mile, and the extreme smallness of the fields, which (including waste land) average only .27 of an acre, render it a slow and costly operation. Seven hundred and twelve square miles were surveyed by the two parties engaged during the year under report, at a cost of seven annas one pie per acre. What remained to be done at the close of the survey year 1867-77 was expected to be completed during the current year.

Another survey party was engaged during the year in making a cadastral survey (scale 32 inches to the mile) of the Government estate of Khoordah, in Orissa, which is now under resettlement. The outturn of work was only 133 square miles, and the cost was as high as 14 annas 9 pie per acre. The average size of the fields is very nearly the same as that of the fields surveyed in Behar, viz. .26 of an acre (as against .27), including waste lands. There are admittedly special difficulties connected with this survey, which would account for some excess in its cost as compared with that of the other cadastral surveys in the province; but after making every allowance the results seem to be satisfactory, and there is reason to believe that the system on which the operations are being

carried out is far too elaborate and costly. A suggestion has been made, and is now under consideration, that if the professional survey party were to survey and map the village boundaries only on the present scale, and to run lines across the villages so as to divide them into mathematically correct figures, securing these lines by temporary marks on the field, the field details might then be filled in at a very much smaller cost by civil parties with accuracy sufficient for all practical revenue purposes.

The Midnapore survey not being a cadastral survey, its work cannot be compared with that of the three other parties mentioned above. At the close of the previous season only 252 miles remained to be finished of the

mouzawar survey (scale four inches to the mile) and 1,200 miles of country in the jungle mehals remained to be surveyed topographically (on the scale of one inch to the mile). Great efforts were made to complete this, but at the end of the season under report 44 miles still remained unsurveyed. The work was much impeded by sickness. This party also surveyed the town of Midnapore on the scale of 16 inches to the mile, part of the cost being borne by the Municipality. The total cost of the mouzawar survey was Rs. 74, and of the topographical survey Rs. 38 per mile. This survey has been completed since the close of the year, but the demarcation of many villages has since turned out to be incorrect, and these imperfections have been reproduced in the professional maps. Both these and the *thakbust* maps must now be corrected at a considerable expense, as otherwise they will not be of any use as accurate representations of the existing divisions of the land.

A professional party was in charge, as last year, of the dearah surveys of the districts of Furreedpore and Backergunge. The outturn of the work was very similar in the two years, viz. 952 square miles, at a cost of Rs. 61,201 in 1876-77, against 958 square miles at a cost of Rs. 61,991 in 1875-76. The work has now been completed, and the party transferred to Saharunpore. It was intended to render this survey of permanent value by extending it inland sufficiently to give it a base line beyond the limits of fluvial action. Unfortunately, however, this base line proved of no use to the Settlement Officer, for whose special purposes the survey was made; so that the very object of the survey was not attained. It was the duty of the professional party, after identifying and securing a safe base line far enough inland not to have been subject to fluvial action, to retrace on the ground the map boundaries of villages between that base line and the river as it existed at the time of the previous survey (that is, on the land which had been subject to fluvial action since the previous survey, and had reformed), and to secure certain convenient points of those boundaries on the alluvial lands, as near as possible to the margin of the river as shown on the previous survey maps. The settlement officer could then, by the aid of these boundary marks, have decided exactly how much land each village had gained by accretion or had lost by diluvion since the last survey was made. He complained, however, that the professional survey work, as actually done, gave him no such assistance. The matter was referred to the Board of Revenue, and a long correspondence ensued between the revenue and the professional

survey departments, the result of which shewed that the costly labour and agency of the latter had been unfortunately misapplied. The requirements of the Settlement Officer, which, with a very little extra labour and cost, could have been complied with by the professional survey party, are now being met by means of non-professional agency. This case, and the case of the Midnapore survey, have shown that it will be necessary in future to define very accurately the relations between the Survey Department and the Board of Revenue in any case where a survey is undertaken by the former for revenue purposes which come under the control of the latter. The professional survey must work in close communication with the revenue authorities, and ascertain their requirements clearly and accurately; and wherever two parties of Government officers have to go over the same ground, there must be more of free intercommunication and of mutual assistance and consultation than has hitherto been usual. As regards the dearah work, indeed, the conclusion come to is that the work of survey can best and most cheaply be done by a non-professional party working under the Settlement Office direct.

Professional surveys of the estates of Dhunwar and the Chota Nagpore Raj in the district of Lohardugga, under the management of the Court of Wards, were carried on during the year. The cost of the surveys was borne by the estates themselves. Fair progress has been made, but for all practical purposes the scheme of the Chota Nagpore, as of the Khoordah, surveys is too elaborate and costly. At the present rate of progress, and on the present plan, it would take 50 years to finish the survey of the Chota Nagpore estate, spending on it yearly Rs. 35,000, which is more than the estate can well afford. The Board of Revenue have been asked, in consultation with the Superintendent of Revenue Surveys and the local officers concerned, to reconsider the whole matter, and to submit revised proposals.

In reviewing the operations of the professional surveys during the year under report, the Board of Revenue have indicated three points which seem, on the experience of the past, to require special attention in future, viz. (1) the arrangements made for procuring Amins; (2) the disputes which occur as to the demarcation of boundaries, and the delays and loss of time attributed to them; and (3) the costliness of the present system of conducting cadastral surveys.

The difficulties which have occurred under the first two heads can, it is thought, be considerably reduced by that more cordial understanding between civil officers and the officers of the professional survey department to which reference has been made above. As to the third head it is doubtful if, for ordinary land revenue purposes, such extreme accuracy and minuteness of detail is worth the cost which it entails. In canal revenue administration it is, however, a necessity. The whole subject is still under consideration.

The most important of the non-professional surveys, which are entirely under the control of the Board of Revenue, were those which were carried on during the year in connection with the professional survey parties in Midnapore and Khoordah.

Non-professional surveys.

8

In Midnapore there were no village demarcations, properly so called, during the year. The field establishment in Midnapore. was chiefly engaged in rendering assistance to the Deputy Superintendent of Revenue Surveys, who had left a large tract unsurveyed during the preceding year, and in erecting the temporary boundary marks necessary to prepare the jungle mehal pergunnahs, 17 in number, for topographical survey.

In April 1877 the Deputy Collector, working under the Civil Superintendent of Survey in Midnapore, was deputed to the Nibhir jungle, to render assistance to the professional party in surveying the villages situated in that quarter of the district. This tract comprises an area of a little more than 25 square miles in extent, and is situated in the saline portion of the district. It is covered with a low thorny bush of the date species, and is in many parts infested with tigers and other wild animals. The jungle had hitherto been considered impenetrable, and, notwithstanding the existence of a hundred villages within its area appertaining to the pergunnahs mentioned above, the whole tract was at first demarcated in one block. On the mistake being brought to notice the villages were separately demarcated, partly by the Thakbust Survey and partly by the Settlement Officer. In 1877 it was found necessary to renew temporary marks on the boundaries of these villages for the guidance of the professional party, and the Deputy Collector was deputed to supervise this work, which he succeeded in bringing to a satisfactory conclusion.

The northern and western frontiers of Midnapore are covered with thick sal jungle, containing, however, very few large trees; and lands situated in the vicinity of the common boundary, between Midnapore on the one side and Bankoora, Manbhoom, Singbhoom, and the semi-independent states of Mohurbhunj on the other, have always formed fruitful subjects of contention between the rival zemindars of adjoining districts. The boundary laid down by the recent survey along the frontier has been permanently secured by the erection of 454 masonry pillars, extending over a distance of nearly 700 miles. These pillars have been erected on every trijunction point, commencing from where the districts of Burdwan, Bankoora, and Midnapore meet, and ending with the trijunction of Midnapore, Mohurbhunj, and Balasore. For similar reasons it was also considered desirable to secure the boundaries of the jungle mehal pergunnahs, and a prism-shaped stone pillar about 18 inches in length has been put at every trijunction point throughout these pergunnahs.

During the year, under report 28 estate and 24 village registers were compiled in vernacular. The compilation of the registers was retarded for some time, pending a discussion as to whether it was necessary for the Superintendent of Survey to prepare registers distinct from the Collectorate registers which were shortly to be prepared by the Collector. On the 18th May the Government decided that the preparation of usual survey registers was necessary, and the work proceeded.

In Khoordah the work done by the non-professional survey party under the Settlement Officer may be divided into three heads, viz. demarcation and survey (1) of the outer boundaries of Khoordah estate, (2) of pergunnah and village

Khoordah.

boundaries within the estate, and (3) of revenue-free tenures and parcels of lands situated within the estate.

Under the first head about 250 miles have been completed by the non-professional party and permanently marked with stones for cadastral survey at every point and bend. For demarcating the western boundary of the Khoordah estate, which marches between it and the tributary states, a special arrangement was made, a Revenue Surveyor with a small establishment being detached from the professional party; while the Settlement Officer was vested with the powers of a special Assistant Superintendent of Tributary Mehals for the disposal of boundary disputes. This step was considered necessary owing to the claims and disputes raised by the tributary Rajahs at every turn, and to the intricate nature of the country. Thirty-two miles of this boundary were laid down and permanently marked with laterite stone, and 57 miles were prepared for the Revenue Surveyor, during the year.

Under the second head temporary boundary marks have been replaced by permanent stones in 206 villages, 945 villages were demarcated, and their boundaries permanently marked. In all there were 806 villages, with an area of 700 square miles, ready for cadastral, and 607, with an area of 400 square miles, ready for boundary, survey in the hands of the professional surveyors for 1876-77. As the professional party only expects to complete the cadastral survey of about 336 square miles and the boundary survey of about 250 square miles during the season 1877-78, it is evident that the area prepared for them is nearly double what they are prepared to undertake. Under these circumstances the non-professional establishments have been utilized, as far as possible, in carrying out the details of the settlement work.

Not only have revenue-free and other entire villages been demarcated, but the several grants, plots, and parcels of lakhiraj lands, have also been marked with stones after a careful inquiry as regards the rights of the occupants to hold revenue free. Excess lands found in possession of lakhirajdars are excluded by this demarcation, and will be brought on the rent roll. Forty-three revenue-free tenures and 5,836 rent-free plots, comprising an area of 818 acres, 12 confirmed revenue-free villages, with a total area of 3,385 acres, were separately demarcated and permanently marked.

The only other survey work requiring notice was that done in the Hooghly and Burdwan districts.

The work of the small establishments employed in these districts during the year consisted of inquiries for the purpose of supplementing the survey operations which were believed to be complete. In compiling the registers it was detected that the party which had effected the interior survey of villages for the purpose of assigning the blocks of land within each village to the estates to which they respectively belonged of the Hooghly district, working only upon the lists of villages supplied by the Collector of Hooghly, had omitted to deal with such villages as lay within the geographical boundary of Hooghly, but formed part of estates borne on the revenue roll and registers of the

Hooghly and Burdwan
survey offices.

Collector of Burdwan, such villages not being noted in the lists supplied from the Hooghly Collectorate. The Burdwan survey party had made corresponding omissions. To remedy these and certain other defects, to correct maps and registers accordingly, to survey chakran holdings, and to complete registers, has been the work of the Deputy Collector, who has been working in these districts under the Superintendent.

During the year 14 estate and 13 village registers in the vernacular were completed; as also the translation of 12 estate and 10 village registers. There were only 11 excess land cases, which were all disposed of during the year. Out of 530 missing land cases on the file 524 were disposed of, and, similarly, out of 3,074 miscellaneous cases 2,790 were disposed of, leaving 284 pending at the close of the year. The measurement of 10,300 chuks in missing land cases* was completed, and 1,900 original maps were recopied and repaired.

* These measurements are the result of the following inquiries. After the area of every block of land in a village, according to the maps of internal demarcation, has been assigned to the particular estate to which it belongs, it frequently happens that the area assigned to the estate does not come up to the area of which the Collector's list shews it to consist. Inquiries are then made as to the missing lands, which are generally found to have been erroneously assigned to some other estate.

Settlements.

THERE were 200 original settlements effected during the year, giving a revenue of Rs. 19,090. There were 316 resettlements, involving a revenue of Rs. 76,483, and 217 summary settlements with a revenue of Rs. 1,41,246. The net increase of revenue from all these settlements was Rs. 43,224. The work actually finished was thus of comparatively small importance. But there were 1,187 settlements pending at the close of the year, involving a revenue of Rs. 9,77,083.

Chittagong.

In Chittagong the noabad settlement is progressing, and the following table shows the outturn of the last two years:—

								Area measured	Number of separate plots.	Cost of measure- ment.	Cost per 100 acres.
								Acrea		Rs.	Rs. A. P.
1877-78	...	...	...	...	...	...	...	137,982	166,674	24,683	17 14 2
1876-77	...	...	...	...	...	...	...	107,405	138,572	20,288	18 14 3

It has now been decided to make a survey of the whole thana of Chukerea in the ensuing field season, in the hope that the result may serve as a guide to the further noabad operations, and as a test of the results likely to be gained by a thorough resurvey of the district. Meantime many important questions in connection with the reassessment of the noabad talooks themselves have been settled.

Of the other pending settlements, the most important are those of Khoorda, the Western Dooars, the Darjeeling Terai jetes, and the Majnamutha and Bellamutha estates in Midnapore. In Khoorda the settlement is being preceded by a cadastral survey ordered some years ago, which has hitherto been worked on a plan costing far more than the results are practically worth. The question of altering the system is under consideration, meantime but little progress has been made with the settlement. In

Western Dooars.

the Dooars, out of 242,819 acres, 187,554 had been measured. The rates have recently been referred to Government for orders, and the work is going steadily on. In the Terai, out of 125,000 acres under settlement, there were only 22,000 acres remaining to be measured in April 1878. There is much

work still to do in settling the rates and other matters, and the operations are not likely to close before December 1879.

The settlement of the temporarily settled estates of Majnamutha and Jellamutha in Midnapore has now practically been completed, and is expected to give an increase to the Government revenue of Rs. 1,36,514, or 63½ per cent. over the former revenue. Notwithstanding the large increase, the rates are really extremely moderate, and the enhancement is nothing like proportionate to the rise in the value of the produce since the estate was last settled thirty years ago. Besides the large properties of Majnamutha and Jellamutha, comprising 21 pergunnahs in themselves, pergunnah Pataspore with its 18 estates, and pergunnahs Kalianpore and Balorampore, both of considerable size, and other properties, making 80 estates in all, have been settled since the appointment of a special settlement officer to this district in December 1871. A large number of these estates consisted of relinquished salt lands, difficult to trace and now settled for the first time. The aggregate proposed increase of revenue is Rs. 1,82,750, or 68·4 per cent. over the former jumma, and of this it may safely be assumed that at least Rs. 1,60,000 will eventually be obtained. The total expenditure since 1871 has been Rs. 4,70,074, on which the increase of revenue may be taken to represent interest at about 34 per cent. per annum. The results are satisfactory, though it must not be forgotten that much of the increase is really secured by the embankment works in Hidgellee, the outlay on which is not taken into account here.

An important settlement concluded during the year in Monghyr was that of Kootloopore, an extensive dearah, the property of Government. Of the total area of 38,000 beeghas in round numbers, 18,000 beeghas, or nearly half, are not assessable as forming the bed of the river, or are covered with sand. Besides, there are about 1,200 beeghas of pasturage and 600 beeghas of homestead lands and pathways. The ryots with occupancy rights hold about 9,000 beeghas, and have received pottahs for 29 years, those with no such rights for ten years, and those whose lands are subject to diluvion have been settled with for one year only. The rates of rent vary from a little over three annas to about Rs. 2-8 a beegha.

The settlement of the seven Government estates in Bogra, known as the Jaipore estates, which had for many years been farmed to Mr. Payter, has been completed. The revenue has been raised from Rs. 31,145 to about Rs. 42,899. There has been no change in the rates of assessment. The increase is due to changes in the class of land occupied by ryots and to extended cultivation. The estates when resettled were offered in farm to Mr. Payter for ten years. On his refusing the offer they have, after the close of the year, been brought under the direct management of the Collector, and a tehsildaree establishment, costing Rs. 5,616 per annum, has been sanctioned for the purpose. It is said that the new State Railway has already exercised a sensible influence in enhancing the value of the land in the neighbourhood of these estates.

In the Sunderbuns 18 settlements were concluded, some shortly after the close of the year, resulting in an annual increase to the revenue of Rs. 4,105, or 24.4 per cent., over the former aggregate jumma of Rs. 16,952.

Grants were originally made to six estates on the island of Saugor, viz. (1) Dhobilat, (2) Mud Point, (3) Ferintosh, (4) Trowerland, (5) Bamunkhali, and (6) Shikarpore. The protective works on Dhobilat were not only completed in one season, when the grantee might have taken three seasons according to the terms of his deed, but have been carried far beyond the letter of his obligation. The work was also well done, and the satisfaction of Government has been communicated to the grantee, Baboo Prosad Dass Dutt. The grantees of Mud Point, Ferintosh, and Trowerland have progressed sufficiently with their protective works to satisfy the conditions of their deeds. The works must be completed by the 31st January 1879. The fifth estate, Bamunkhali, is still uncultivated and uninhabited, and consequently no protective works are yet needed. In regard to the last, viz. Shikarpore, it appears that up to December 1877 the grantees had not even commenced upon their protective works. But the deed in this case was executed long after the deed in the case of the other five grants had been completed, and the time allowed for completion of the protective works is up to 31st January 1880, progress being shewn at the termination of each intermediate year. The estate will be inspected early next season.

The work of settlement in Bengal has been much facilitated by the passing of Act III (B.C.) of 1878, which lays down a procedure to be followed for bringing the under-tenants and ryots to an early decision with respect to the settlement officers' rates, and giving *à priori* validity to these until they are set aside by a decree of court.

It was stated in the report for last year that what remained to be finished of the Sonthal Pergunnahs settlements would be completed during the field season of 1877-78; but, owing to the absence on leave of Mr. Wood, the settlement officer, for six months of the year under report, and to other causes, unavoidable delay has occurred, and the settlement will only be completed during the field season of 1878-79.

Government Estates.

THE total number of Government estates on the revenue roll during the year 1877-78 was 2,592, including 23 ryotwari tracts. The current revenue demand amounted to Rs. 21,57,227, and the arrear demand to Rs. 7,62,127, making a total demand of Rs. 29,19,354. The collections of the current demand were Rs. 14,83,280, and of the arrear demand Rs. 4,57,886. The amount remitted as irrecoverable was Rs. 71,569. The uncollected balances of the current and arrear demands were Rs. 9,06,618, or 31 per cent. of the gross demand. It has hitherto been the custom to require special explanation wherever the collections fell short of 90 per cent. of the whole demand, current and arrear. Throughout all Bengal the required standard was only reached in seven districts, and exception has been taken to it as impracticable and unfair to the district officers. The Board of Revenue especially expressed an opinion that if the collections, current and arrear, amounted to 90 per cent. of the current demand alone, they should be considered satisfactory.

“The true test of efficiency is” (they said) “the year’s collections weighed against current demand, and separating the account of arrears and its percentage on the annual demand. If the collections fall short of 90 per cent. of the current demand, or the arrears exceed 50 per cent. of a year’s demand, some good reasons ought to be adducible.” The Government was unable to accept the Board’s proposition in the form in which it was put. If every year 10 per cent. of the current demand was to be added to the arrears of previous years, which seemed to be the effect of the suggestion, the management could not be considered satisfactory. It was, however, admitted that undue importance might have sometimes been attached to the bare percentage of collections, looked at with reference to the total arrear and current demand of a single year; and it is often impossible in zemindari management to avoid at times allowing a considerable proportion of the current year’s demand falling over into the year following. What has really to be looked at is whether the arrear demand in each estate is inordinate in amount, and whether it is increasing or lessening. When an estate is in a healthy state, the collections, taken one year with another, should be equal to the full current rental of the property. That a part of such collections is nominally on account of arrear rents makes no real difference. The management is so far entirely satisfactory. When, owing to bad seasons or other calamity, the collections of one year have been bad, it is obviously the duty of the management

to recover the short collections as soon as practicable from the harvests of future years together with the current rental; and in that case the results cannot be considered satisfactory, unless the collections exceed the gross annual rental of the property by an amount proportionate to the short collections of the past. It is, however, in all cases better to write off rents really irrecoverable than to keep them for years on the books of an estate as an arrear demand against the ryots. Nothing disheartens a ryot so much as the knowledge that his payments of to-day are being credited to the rents of three years ago. Current collections would, it was pointed out, be in many estates materially improved by a final, and even liberal, clearance of arrear accounts, and the Board were asked to direct special attention to this matter.

Adopting the test proposed, and applying it to the current year, it appeared that the actual collections in the *Government estates* during the year were, as shown above, Rs. 14,29,261, or only 88 per cent. of the current demand, and the balances Rs. 7,99,575, or about 49 per cent. of that demand. At the close of 1876-77 the balances were only 41 per cent. There had therefore been a falling off in results, but this is mainly attributable to short collections in the Dacca and Chittagong Divisions, due partly to the cyclone and partly to bad administration in Noakholly. Omitting those divisions, the collections of the year were only Rs. 17,943 short of the current demand, and the balances were less than 25 per cent. of that demand.

In the ryotwari tracts the collections were nearly 99 per cent. of the current demand, and the gross balance at the close of the year was about 20 per cent. of a year's demand, most of it being realizable.

Besides the above-mentioned estates, which are the property of Government, a large number of estates belonging to private persons were under the charge of Government officers. The total number of estates under direct management was 8,380 during the year, or 139 more than in 1876-77. The collections were Rs. 8,29,042, against Rs. 7,56,063, and the charges amounted to 7 per cent. on the collections—slightly in excess of those of the preceding year.

During the year 56 Government estates, with an area of 2,113 acres and a Government demand of Rs. 1,541, were sold for Rs. 35,225; 52 plots of railway C land, with an area of 201 acres, were sold revenue free for Rs. 9,677; and seven plots of C lands (area 23 acres) for Rs. 549. The price originally paid for these railway lands was Rs. 294. Eight plots of A land were given up and sold for Rs. 4,523, the area being 52 acres.

The general features of the direct management of estates by Government officers, especially with reference to the working of the *tehsildari* system, have been the subject of considerable discussion of late. A mistake seems to have been made in forcing the same system upon all parts of the country indiscriminately without reference to local peculiarities and customs. In Chota Nagpore, for instance, it was found that direct management did not answer. The ryots there are accustomed to look up to the village headman, who generally acts as petty farmer of the village, and object strenuously to his being superseded by a

Estates under Government management.

Sales.

Principles of management.

Government *tehsildar*. 'It has now been admitted that a farming system of this kind is not open to the same objections as the *ticcadari* farms of Behar, and it is in fact the only way in which rents can be got in under the peculiar system of cropping in force in that province. In Julpi-goree and Darjeeling the *tehsildari* establishments worked fairly well, though the revenue systems of those districts are not in all respects satisfactory at present. In the Chittagong Division, on the other hand, the results were extremely unsatisfactory, and the Board have been asked to submit any suggestions for improving or modifying the system as now applied there. In the Dacca Division also the results were unfavourable, and it seems very doubtful whether the scattered *churs* of Backergunge can ever be brought under cultivation, and be settled and properly managed by any Government agency. There is no object in perpetuating a system which is found to be entirely unsuited to the circumstances of a tract, merely because it is of recent introduction. In large, well-cultivated, compact-lying groups of estates there should be no difficulty, if the *tehsildari* establishment is properly supervised, in making this kind of management a success. But where ryots have to be brought in and settled, reclamation effected, and advances made, or where the Government estates are small and widely scattered, there is no avoiding the necessity of introducing middlemen, such as the *howladars* of Backergunge, making it their interest to do what the machinery of Government is too inelastic to undertake with efficiency. In Behar the direct system has worked well, and benefits both the ryots and the revenue, and in the Presidency Division also, where the condition of the estates is more settled and the people more advanced, the results are also satisfactory as a rule.

Wards' Estates.

THE Board's report on wards' estates for 1877-78 has not yet been received. It is always a matter of difficulty to get in returns punctually from the numerous properties under the management of the Court of Wards, and in former administration reports the practice has been to give the facts and figures of the year preceding that actually under review. Last year's report therefore dealt with the history of 1875-76 only. In the present report the results of 1876-77 are given, but the information is brought down to the close of 1877-78 in respect of all those estates from which returns had been received up to the date of going to press.

During the year 1876-77 there were no less than 469 estates under the management of the revenue authorities, as compared with 462 in the previous year. The following statement shows the total number of estates administered by Government on behalf of their proprietors, and the classes to which they belong:—

	1875-76.	1876-77.
Class I.—Wards' estates managed under Act IV (B.C.) of 1870	55	66
„ II.—Estates of lunatics under the charge of the Collector by an order of a Civil Court under section 11, Act XXXV of 1858	20	19
„ III.—Estates of minors placed under the Collector's management by an order of a Civil Court under section 12, Act XL of 1858	58	42
„ IV.—Shares of disqualified proprietors retained under the Collector's management by an order of a Civil Court passed under Act IV (B.C.) of 1870, section 3	2	2
„ V.—Attached estates	316	339
„ VI.—Chaklajat estate placed under the Board by special orders of Government	1	1
Total	462	469

The total includes the four estates of Narail, Baranagore, Pyrabund, and Abdool Waheb, from which no returns were received for the year. Of the 339 attached estates, no less than 319 are petty estates sequestrated for debt in the Chota Nagpore Division.

Excluding the four estates mentioned above, the total demand of rent in all classes of estates amounted to Rs. 1,58,91,201, of which

Rs. 75,11,114 were the current demand of the year 1876-77 and Rs. 83,80,087 represented the arrear demand on account of previous years. During the year Rs. 63,84,630 were collected, of which Rs. 3,764 were payments made in advance, and Rs. 4,13,134 were remitted. A balance of Rs. 90,97,201 was left outstanding at the close of the year. The total demand of Government revenue, both current and arrear, from all classes of estates amounted to Rs. 27,70,590, of which Rs. 23,72,016 were paid and Rs. 6 remitted, leaving an outstanding balance at the close of the year of Rs. 3,98,565 due to Government on account of the current and arrear demand. The following statement shows the results of the collection of rent and revenue in each division during 1876-77 :—

	Burdwan.	Presidency.	Rajshahye.	Dacca.	Chittagong.	Patna.	Bhagulpore.	Orissa.	Chota Nagpore.	TOTAL.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Arrear rent ...	1,24,408	32,22,701	6,49,135	4,12,854	1,25,536	31,28,333	3,85,501	52,904	2,78,166	83,80,087
Current demand of rent ...	2,53,531	23,50,512	8,23,394	5,52,186	1,63,495	24,00,807	4,22,652	1,17,504	4,20,733	75,13,114
Total collections during the year	2,49,713	22,11,724	7,87,888	5,43,309	88,547	15,50,039	4,17,268	1,29,226	3,97,916	63,84,630
Government revenue paid during the year ...	51,347	10,57,724	3,09,238	1,34,018	37,203	5,01,447	2,00,274	58,013	42,752	23,72,016

In reviewing the results of the administration of wards' and attached estates it has hitherto been the practice to compare the amount of rent realized during the year with the total demand, both current and arrear. Tested by this standard, it is inevitable that the actual collections in any year must bear a comparatively small proportion to the actual demand, while the standard itself is fluctuating and uncertain. It may be possible to lay down, as in the case of Government estates, that the collections of the year should, as a rule, not fall below a certain percentage of the current demand; but the proportion which the collections should bear to the total demand cannot be defined at all, for the amount of the arrear balance depends mainly upon the condition of the estate, and the relations between the proprietor and his tenants when Government assumes the management, and different officers are found to take very different views as to the possibility of recovering arrears. It may reasonably be expected that if the test of efficient administration is to be the proportion of the total demand collected, the managers of estates will be more ready to recommend that balances should be written off as irrecoverable, and thus debts which might be realized will be lost. The test of successful management should be the proportion borne by the collections to the current rather than to the total demand. Applying this standard to the results of the past year, it appears that the realizations amounted to 85 per cent. of the current demand. In six districts the percentage of

collections was exceptionally low, but this was due to the operation of special causes, and not to laxity of management on the part of the Court of Wards. After making allowance for the embarrassed circumstances of many estates, and for the fact that the rent-roll of a property under native management frequently exaggerates the assets, it might have been expected that a larger proportion of the demand should have been collected. It is the first duty of a Government manager to enforce the punctual realization of rents, and no schemes of improvement should be allowed to hinder this object.

The following statement shows the financial condition of the principal wards' estates in Bengal during the year 1876-77:—

1	2	3	4	5	6	7	8	9	10
NAME OF ESTATE.	Current demand of Government revenue, and of rent due to superior landlords from the estates.	Arrear demand of rent due to the estates.	Current demand of rent due to the estates.	Rent collections of the year on account of both current and arrear demands.	Miscellaneous receipts (other than rent).	Expenses of management.	Disbursements on all other accounts.	Total investment of estates (other than land).	Debts on the estates.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Chackdigheo	1,06,531	92,165	1,57,090	1,47,001	97,988	13,437	1,35,791	3,71,061	4,251
Satklira ...	1,87,707	50,56,192	3,30,424	3,25,565	48,175	24,677	1,39,987	.....	3,45,075
Gobardanga ...	98,043	1,01,338	1,76,300	1,78,895	6,196	13,819	49,818	.....	.....
Paikpara ...	3,92,596	2,97,534	8,96,500	8,17,031	2,46,858	79,286	5,63,735	25,93,922	.....
Nudda ...	75,587	75,184	1,52,380	1,52,252	15,698	10,002	60,863	.....	.....
Nuddanga ...	60,589	85,001	1,16,129	1,15,056	9,874	6,942	45,565	2,11,378	.....
Nashipore ...	1,93,211	2,20,796	2,66,911	2,59,109	11,498	6,754	35,127	.....	2,000
Chauchal ...	74,104	1,10,649	1,98,648	1,67,441	28,801	35,822	71,323	3,27,320	21,200
Chacklajat ...	1,18,025	2,26,219	2,67,180	2,37,448	59,061	36,342	72,181	.....	195
Estate of A. J. Brodie and brothers.	82,187	1,17,796	95,611	98,292	33,929	11,442	29,977	1,47,156	6,311
Durblhanga ...	4,35,792	27,92,380	21,48,483	13,27,359	7,79,393	2,65,692	9,07,513	16,33,723	3,666
Chota Nag-pore.	14,364	1,37,725	1,36,825	1,22,475	11,278	16,879	98,149	.....	90,664

In several estates which had become seriously involved vigorous reforms were commenced, and real progress was made in the difficult task of bringing order out of the confusion in which too many estates are involved when they pass under the management of the Court. The main principles by which the Board of Revenue were guided in their administration were sound, and were calculated to reconcile the apparently conflicting duties of Government in its double capacity of landlord and trustee.

During 1876-77 fifteen lads were educated at the Wards' Institution in Calcutta, at an average cost of Rs. 214 each per mensem. This was slightly above the average cost in 1875-76, but prices were high during the year, and, looking to the social position of the wards, the amount was not excessive. The lads make fair progress in their studies, considering the want of any special stimulus to work. They take very readily to manly exercises—riding, shooting, swimming, wrestling, and walking. They play quoits, cricket, and billiards, and their moral tone is believed to be thoroughly healthy.

Out of the 169 wards' and attached estates under the management of the revenue authorities at the close of 1876-77, 103* have since been released. In 1877-78, 77† new estates were brought under management, and there were therefore 443 estates under management at the close of that year.

• Wards' estates ...	No. 8
Attached „ ...	95
Total ...	103
† Wards' estates ...	22
Attached „ ...	55
Total ...	77

The current demand of Government revenue and of rent due to superior landlords from 426 estates for which returns have been received amounted to Rs. 22,86,467 and Rs. 3,33,592 respectively, and the arrear demand to Rs. 4,14,423 and Rs. 1,54,446; thus making a total demand of Rs. 27,00,890 and Rs. 4,88,038. Of this Rs. 23,54,707 (inclusive of excess payments amounting to Rs. 8,746) and Rs. 3,68,747 respectively were paid, and Rs. 5,138 and Rs. 928 remitted, leaving a balance of Rs. 3,49,791 and Rs. 1,18,363, of which Rs. 2,87,703 and Rs. 75,755 are current and Rs. 62,088 and Rs. 42,608 arrear.

The current demand of rent due to these estates amounted to Rs. 71,94,143, and the arrear demand to Rs. 69,93,999, making a total of Rs. 1,41,88,142.

The total collection of rent was Rs. 74,77,396, inclusive of excess collections amounting to Rs. 95,945, the greater part of which, Rs. 85,982, was in the Durbhunga estate. This result was on the whole satisfactory, as the collections exceeded the entire demand for a year, but the arrears, though somewhat reduced, are still heavy. The remissions of rent amounted to Rs. 9,35,416, of which Rs. 6,75,382 were in Raj Durbhunga, thus leaving a balance of Rs. 58,71,275 in arrear. Of this balance Rs. 29,26,898 are current arrears, and Rs. 29,44,377 arrears of more than a year's standing.

The following is a short account of some of the principal estates which were under the management of the revenue authorities during 1877-78, and the reports of which have been received.

BURDWAN DIVISION.—*Chuckdighee*.—This estate was taken charge of by the Court of Wards in December 1874. It is principally situated in the district of Burdwan, a part only being in Hooghly, and is managed by Baboo Woomesh Ghunder Mitter. The ward, Baboo Lolit Mohun Roy, was 18 last birthday, and is being educated at the Wards' Institution, Calcutta. Nothing of any importance occurred in the affairs of this estate during the year. An appeal has been preferred by Srimati Rajeswari Debi, the widow of the late proprietor, against the decision of the Second Subordinate Judge of Burdwan, dismissing her suit to set aside the will of her late husband and dispossess the ward. This lawsuit has cost the estate large sums of money, and is likely still to give trouble.

The current demand of Government revenue due by the estate was Rs. 20,172, of which Rs. 20,138 were paid. The current demand of rent due to the estate was Rs. 1,57,005, and a total amount of Rs. 1,45,505 was collected. The savings of this estate, which are invested in Government securities, still exceed Rs. 3,20,000.

PRESIDENCY DIVISION.—*Goberdanga*.—Charge of this estate was assumed in November 1879. It is scattered over the districts of

24-Pergunnahs, Nuddea, Jessore, and Burdwan, and managed by the Collector of the 24-Pergunnahs with the assistance of Baboo Girish Chunder Bose. There are four wards, aged respectively 20, 18, 13, and 9 last birthday. The eldest was withdrawn from the Wards' Institution in October last to enable him to acquire some knowledge of zemindary business, a tutor being retained for him at home. The 2nd and 3rd continue at the Institution, and the 4th lives with his mother.

The annual Government revenue due from the estate is Rs. 43,974, all of which was paid. The current rent due to the estate amounted to Rs. 1,77,539, and Rs. 1,78,561, including arrears, were realized. The savings of this estate, which are invested in Government securities, exceed Rs. 23,000. When brought under the Court of Wards it was Rs. 93,351 in debt.

Paikpara.—This estate is the largest in the Presidency Division, and is scattered over 19 districts in Bengal, Orissa, and the North-Western Provinces. It continues to be efficiently managed by Mr. Robert Harvey under the superintendence of the Collector of the 24-Pergunnahs. One of the major proprietors, Kumar Grish Chunder Sing, died during the year under report, in October last, leaving his widow his sole heir and successor, with power to adopt, on the understanding that his share in the estate would continue under the superintendence of the Court of Wards so long as the shares of his other brothers so remained. The minor Kumar Indra Chunder Sing attained his majority since the close of the year. The other minor, Kumar Sharat Chunder Sing, attended the Metropolitan Institution, Calcutta, and was also educated at home by Baboo Rajkissen Mookerjee and another native private tutor. The major proprietors appear to be quite satisfied with the management, and have shown no disposition to remove it from the Court of Wards' control.

The current demand of Government revenue due by the estate was Rs. 3,72,507, and a total amount of Rs. 3,83,695, including arrears, was paid, and Rs. 5,014 remitted, being nominal arrears. The current demand of rent due to the estate amounted to Rs. 8,98,551, and a total amount of Rs. 9,11,926 was collected and Rs. 8,419 remitted, most part of which was on account of diluvion. The rent-roll has been raised from Rs. 8,34,501, when the estate was brought under management, to Rs. 8,91,646, thus showing an increase of Rs. 57,145. The savings of this estate, which are invested in Government securities, exceed Rs. 25,30,000.

Nuddea.—This estate is situated in the districts of Nuddea, 24-Pergunnahs, and Moorshedabad, and is controlled by the Collector of Nuddea, with the assistance of a manager, Baboo Kartic Chunder Roy. It was brought under the management of the Court of Wards in January 1871, and the minor was nine years of age in 1877-78. He is being educated by a private tutor.

The current demand of Government revenue due by the estate amounted to Rs. 74,294, and a total amount of Rs. 74,292, including arrears, was paid. The current demand of rent due to the estate was Rs. 1,52,960, and a total amount of Rs. 1,63,972 was collected. The rent-roll of the estate has been increased by Rs. 5,116 during

Government management. The savings of this estate, which are invested in Government securities, exceed Rs. 29,000.

Nuldanga.—This estate was brought under the management of the Court of Wards in August 1870, and is under the Collector of Jessore, who is assisted by Baboo Annoda Persad Sen. The lands of the estate lie in the districts of Jessore, Nuddea, Furreedpore, and Hooghly. The minor, who was 19 last birthday, is at the Wards' Institution, Calcutta, and is being educated at the Hindu School. The current demand of Government revenue is Rs. 48,483, and the whole of this amount was paid. The current amount of rent due to the estate is Rs. 1,15,910, and Rs. 1,02,493 was collected, including arrears. The gross rental of the estate has been reduced by Rs. 667. The savings of this estate, which are invested in Government securities, exceed Rs. 2,25,500.

Nashipore.—This estate has been under the management of the revenue authorities since January 1866. The greater portion of it is situated in the district of Moorshedabad, and covers an area of 340 square miles. Kumar Runjit Singh, the adopted son of the elder Rancee, who will succeed to the property, was 13 years of age in the year under review, and is studying at the Berhampore College, where his progress has been good and his conduct satisfactory. The estate is managed by the General Manager of estates in Moorshedabad. The current demand of Government revenue due from this estate is Rs. 1,84,068, of which all but Rs. 61,705 was paid, and the greater portion of this balance has been paid since the close of the year. The rent due to it amounts to Rs. 2,67,201. The total collections of rent amounted to Rs. 2,87,801, inclusive of arrears. The gross rental of the estate has been raised by Rs. 1,041 during the period it has been under management. The debts of this estate at the time of taking charge were Rs. 3,09,177; on the 31st March 1878 they had been reduced to Rs. 30,150.

During the year under review Rancee Luchmi Kumari executed an *arpannama*, whereby she conveyed to her daughters-in-law, Rancees Janna Kumari and Subhadra Kumari, the Nashipore wards, the *debutter* property of the family on certain conditions, with the view of its being brought under the management of the Court of Wards. The Court of Wards accepted the trust, but the *debutter* property was in a very encumbered condition, and for some time to come will impede the extrication from debt of the original property. This estate would have been in a more flourishing condition but for the frauds and embezzlements to which reference was made in last year's report.

Syndpore.—This estate, which forms the chief endowment of the Hooghly Imanbarah, has been administered by the Collector of Jessore on the part of Government as trustee since 1816, and the greater part of it is ~~not~~ in putnee. Nothing of importance occurred during the year under report. The estate pays a revenue to Government of Rs. 95,254, all of which has been paid up. The rental derived by the estate is Rs. 1,70,674, and the total sum collected, including arrears, amounted to Rs. 1,67,467. The rent-roll of the estate when taken in charge was Rs. 1,24,689, and it is now Rs. 1,66,781; thus there has been an increase of Rs. 42,092. It now remits regularly Rs. 60,000 per annum to the Collector of Hooghly for the purposes of the trust.

Narail.—This large Jessore estate is one of the estates for which no return has yet been received; five-sixths of it belong to major proprietors, and one-sixth only to two minors under the Court of Wards. The great difficulty is to secure a common manager, in whom both the Government and the major proprietors have confidence, or else to appoint separate managers who will work in harmony with one another. It was hoped that this object had been attained in the appointment as common manager of Mr. A. Hume Smith, but since the close of the year this hope was found delusive, and he has resigned his appointment. An effort is now being made to procure the assent of all the proprietors to the appointment of Deputy Collector Baboo Kali Churn Ghosh, but the accounts of the estate are in great confusion, and no returns have been furnished for several years.

Dacca Division.—*Jagat Kishore Acharjee.*—This estate, which was brought under the management of the Court of Wards of the Dacca Division in January 1876, is situated in the districts of Mymensingh, Dacca, Bogra, and Moorshedabad, the greater portion being in Mymensingh, and is under the management of Deputy Collector Baboo Bopin Bohary Mookerjee. It is heavily involved, and for this reason it has been decided to farm it out in mouzals or small blocks to the headmen or respectable residents on it. The minor, who was 14 last birthday, attends the Hindu School in Calcutta, and resides at the Wards' Institution. The revenue due to Government from the estate is Rs. 57,801, all of which was paid. The current demand of rent due to the estate is Rs. 2,16,775, and Rs. 2,15,880, including arrears, were realized.

The gross rental has been considerably increased, it being now Rs. 2,13,063, while it was Rs. 2,00,965 when the estate was first brought under management. The debts exceeded 8½ lakhs of rupees at the close of the year. The surplus of income over expenditure enables the full interest to be paid and some Rs. 30,000 of the principal to be also liquidated annually. This will, of course, increase as the interest is diminished, owing to the reduction of the debt, but it is clear that the entire amount will not be paid off during the minority.

PATNA DIVISION.—*Durbhunga.*—This is the largest estate under the management of the Court of Wards, and was taken charge of in November 1860. It is situated in the districts of Durbhunga, Mozufferpore, Bhagulpore, Monghyr, and Purneah, and is managed by Colonel J. Burn. The manager is also the guardian of the minor Maharajah, who was 19 last birthday. The greater portion of the estate is now under *sur* or direct management, only a small portion still continuing in the hands of farmers pending the expiration of their existing leases. The new system has been pronounced to be working satisfactorily.

The survey and settlement of pergunnah Allapore, appertaining to the estate, was completed during the year. The result shows an increase of 7,120 beeghas; and for this reason, though there has been a slight reduction in rates, the gross rental of the pergunnah has been raised by more than Rs. 9,000. The cost of the survey and settlement was Rs. 45,228.

The principal works undertaken during the year were alterations and additions to Anund Bagh, the present residence of the Maharajah,

and repairs to some of the Raj houses. The proposal to construct a new palace has been deferred, owing to an opinion expressed by the Advocate-General that, as the building could not be completed during the minority, the Maharajah could not be legally bound by the terms of any contract entered into by the Court of Wards. The Khurruckpore irrigation works were completed in March 1877, and cost Rs. 5,65,508. The total area benefited by these works is 30,000 beeghas, and the total increase of rent in consequence is estimated at Rs. 20,000, or a little less than 4 per cent. on the outlay. It is far from certain, however, whether this will be permanent.

The Government revenue due from the estate amounts to Rs. 4,34,795, of which all but Rs. 5,437 was paid.

The current demand of rent due to the estate is Rs. 21,40,844, and the total amount collected, including arrears, was Rs. 25,23,753.

The gross rental of the estate, when taken in charge, was Rs. 16,39,359, and it now is Rs. 21,37,202, thus showing an increase of Rs. 4,97,843. The investments in Government securities at the close of the year amounted to Rs. 22,40,000. The Maharajah is now 20 years of age, and takes an active share in the management of his property. He is consulted in all matters of any consequence. His younger brother, Kumar Rameshwara Singh, aged 19, was appointed a member of the Covenanted Civil Service at the close of the year, and discharges the duties of an Assistant Magistrate and Collector at Durbhunga.

BHAGULPORE DIVISION.—Surjapore.—This estate is principally situated in the district of Purneah, and was placed in the hands of the Collector in June 1874 by an order of the Civil Court under section 12 of Act XL of 1858. Of the three minors, the second, named Akbar Reza, died of fever and spleen in October last, and the other two, aged respectively 15 and 9, resided during the year at Monghyr, where they attended the zillah school. A proposal was made by the Commissioner since the close of the year to place the boys at the Benares Wards' Institution.

The estate, which has been under the management of Deputy Collector Baboo Rajani Nath Chatterjee, pays revenue to Government amounting to Rs. 83,876, all of which, with the exception of Rs. 18, was paid.

The current demand of rent due to the estate is Rs. 1,84,346, and Rs. 2,23,041, including arrears, were realized.

The debts of this estate at the time of taking charge were Rs. 6,37,564; on March 31st they had been reduced to Rs. 2,37,306.

Chanchal.—Owing to the incompetency of the two widows of the late proprietor this estate was taken under the management of the Court of Wards in June 1871. It is situated in the district of Maldah, and is managed by Mr. H. R. Reilly, of the Subordinate Executive Service.

The current demand of Government revenue due from this estate is Rs. 68,509, all of which was paid up.

The current demand of rent due to the estate is Rs. 1,72,227, and the collections amounted to Rs. 1,79,401, inclusive of arrears.

The savings of this estate, which are invested in Government securities, exceed Rs. 3,17,000.

CHOTA NAGPORE DIVISION.—*Chota Nagpore.*—The Chota Nagpore estate was brought under the Court of Wards in July 1869, and is held in trust for the minor Maharajah, who, with his step-brother, is at the Benares Wards' Institution, where they are being educated. The Maharajah was 12 years of age in 1877-78, and, his step-brother 11. The estate is managed by Major N. Lewis.

The Government revenue payable by the estate is Rs. 14,364, the whole of which was paid. The current demand of rent due to the estate was Rs. 1,37,821, and the total amount collected, including arrears, was Rs. 1,25,618. The rent-roll was raised from Rs. 1,34,970 to Rs. 1,37,767, being an increase of Rs. 2,797. The debts of this estate at the time of taking charge were Rs. 4,92,051; on the 31st March 1878 they had been reduced to Rs. 64,206. The right of succession to the estate, that is, the legitimacy of the present minor, is still under litigation, and is now pending before the Privy Council.

RAJSHAHYE AND COOCH BEHAR DIVISION.—*Chaklajal.*—This estate comprises that portion of the zemindaries of the minor Rajah of Cooch Behar which lies within British territory, and was placed under the management of the Court of Wards in 1872 by an order of the Lieutenant-Governor. It is managed by Baboo Taruk Nath Mullick, of the Subordinate Executive Service. The minor's age was 15 last birthday, and he attended the Patna College during the year under report. The survey and measurement of the estate are in progress. Three talooks, comprising an area of 72,068 beghas, had been surveyed up to June 1877, and fair progress was made in field operations during the year. It is expected that the resettlement will yield a substantial increase of rent. This property pays a revenue to Government of Rs. 1,16,712, all of which was paid up. The current demand of rent due to the estate amounted to Rs. 2,67,504, and Rs. 2,86,917, including arrears, were realized. The gross rental of the estate has thus far been raised from Rs. 2,66,136 to Rs. 2,67,478 under the Court of Wards' management.

Chooraman.—This estate, which is situated in the districts of Dinagepore, Maldah, and Purneah, and is under the control of the Collector of the first-mentioned district, was taken charge of by the Court of Wards in April 1877. It is under the management of Mr. G. French, the General Manager of estates in Dinagepore, and the minor, who was nine years of age on his last birthday, is under the guardianship of his mother. Arrangements are, however, being made for his removal to the Wards' Institution at Benares, where his mother will also reside. The current demand of Government revenue due from the estate is Rs. 56,735, all of which, with the exception of Rs. 2,628, was paid up.

The current demand of rent due to the estate was Rs. 1,10,208, and the total sum collected, including arrears, was Rs. 1,86,427. The rent-roll of the estate has been increased from Rs. 92,174 to Rs. 1,10,203, or by Rs. 18,029.

The debts of this estate at the time of taking charge were Rs. 28,872. On 31st March 1878 they had been reduced to Rs. 15,525.

It will be seen from the above summary that in the great majority of the large estates the minors have been freed from debt and often

considerable savings accumulated. In many of the smaller estates, especially those in the district of Sarun, they are heavily indebted, and it is with the greatest difficulty that the lands can be preserved from sale. In most cases, however, the high price paid for landed property enables the Court to clear the estate by the sale of a portion of it. The authorized Court of Wards' valuation of estates for the purposes of the annual return is only 12 years' purchase of the net income, i.e. rent less revenue, but the actual experience of sales proves this to be altogether inadequate. Lands in Behar have frequently realized 33 years' purchase, and even under the most unfavorable circumstances have rarely fetched less than 25 years' purchase.

III.—PROTECTION.

Course of Legislation.

Of the Bills before the Council of the Lieutenant-Governor of Bengal which were mentioned in last year's Administration Report, the two following passed into law in the course of the official year now under review.

The Bill for extending the provisions of the Labour District Emigration Act to Chittagong and the Chittagong Hill Tracts received the assent of the Governor-General on the 25th of February 1878 and became Act II of 1878 on the 27th of March.

Act to extend Bengal Act VII of 1873 to Chittagong.

The Bill for defining and limiting the powers of Settlement Officers with regard to the enhancement of rent, the purport of which was explained in last year's report, became law on the 3rd April 1878 as Act III of 1878.

Powers of Settlement Officer with regard to enhancement of rent.

A Bill for the licensing of trades, dealings, and industries within the territories subject to the Lieutenant-Governor of Bengal was brought before the Council at the close of the year 1877. This Bill was designed to enable the local Government to bear its share of the burden imposed upon the country at large by the financial policy of the Government of India, which sought to provide a permanent surplus of income over expenditure as a sort of insurance fund against the charges on account of recurrent famine. It provided for the levy of a license fee on trades, dealings, and industries throughout Bengal. No person whose annual earnings from his trade, &c., are less than Rs. 100 is liable to the tax; but when his earnings exceed that sum, he is charged according to his means, the Collector determining the class in which he should be placed. The fees vary from Rs. 500 to Re. 1; and if any person can show that the fee levied upon him exceeds 2 per cent. upon his annual earnings from his trade or dealing, he is entitled to have it reduced to that of some lower class or grade. In the interior of the country certain important and leading occupations form the first class of the schedule, and pay a fee of Rs. 500 or Rs. 200, as the Collector may determine, subject always to the 2 per cent. limitation. In the lower classes no specification of calling is attempted, and the Collector is left free to classify the applicants for licenses according to his judgment of their means. The rates of fee in those classes are

Bengal License Act.

Rs. 100, Rs. 50, Rs. 20; Rs. 5, Rs. 2, and Re. 1. For the town of Calcutta it was thought better to adopt, with slight modifications, the schedule of callings already in force under the Municipal Act, only raising the rates of fee to correspond with the schedule for the interior. The tax will be collected in Calcutta through the Municipal Agency, and power is taken in the Act to make similar arrangements in any mofussil municipality. The proceeds of the tax are to be applied "for the purpose of increasing the revenues available for defraying expenditure incurred, or to be incurred, for the relief and prevention of famine in the territories administered by the local Government, or, if the Governor-General in Council so directs, in any other part of British India." The Bill was introduced into Council on the 29th of December 1877, and became Act I of 1878 on the 6th of March.

The Bills introduced into the Council last session, which became law after the close of the year under review, are as follow:—A short Bill to allow the local Government, to empower the Corporation of Calcutta to appoint the registering officer of hackney carriages, and to make him subject, when so appointed, to the Corporation, was introduced into the Council on the 30th of March, and, having been assented to by the Governor-General, became Act IV of 1878 on the 15th of May. A Bill to amend section 55 of the Land Registration Act, 1876, which conferred too extensive powers on Collectors, was introduced into Council on the 30th of March, and became Act V of 1878 on the 29th of May. A Bill to provide for the cleansing and construction of latrines in first class municipalities was brought into the Council on the 23rd of March 1878. This Bill empowered the Commissioners of any first class municipality to levy fees on holdings, or a rate per head, and to apply the proceeds to the maintenance of an establishment for the cleansing of latrines within the municipality, and to the construction of public latrines. It passed the Council on the 6th of April, and, after receiving the assent of the Governor-General, became law on the 3rd of July 1877. The Bengal Excise Bill, which, as mentioned in the last report, was vetoed in 1877 by the Governor-General on technical grounds, was reintroduced in an altered form on the 2nd of February. While under the consideration of the Select Committee, it was entirely recast on the model of the Northern India Excise Act of 1871, and in other ways was much improved and amended. It received the assent of the Governor-General on the 3rd of July 1878, and came into force as Act VII of 1878 on the 24th of July 1878. A Bill for the regulation of the rural police in the districts of Hazaribagh and Lohardugga was introduced into Council on the 16th of March 1878, was passed on the 10th of April, and, having received the Governor-General's assent, became law on the 24th of July 1878. This Bill was drawn on the lines of the Village Chowkedaree Act, 1870, the provisions relating to panchayets being omitted and some other modifications to suit the circumstances of the two districts being adopted. The Bill to amend the rent law in Chota Nagpore, which was described in last year's report, passed the Council and received the assent of the Lieutenant-Governor on the 14th of March 1878. The Governor-General has postponed giving his assent to this Bill until the Bill to amend the Code of Civil Procedure is passed. Section 4 of the Code

of Civil Procedure saves "any local law proscribing a special procedure for suits between landlord and tenant;" but it has been held that the local laws referred to in that section are local laws in force when the Code was passed. The result is to debar the local legislatures from dealing with such suits. This defect will be remedied by the Bill to amend the Code of Civil Procedure now before the Governor-General's Council. Another point on which it was found that the provisions of the Code might clash with those of the Bill has also been referred to the Select Committee on the Civil Procedure Code Amendment Bill, and it is not improbable that the scope of the Amendment Bill may be extended so as to remove all difficulty.

The Bill to amend the law relating to the Court of Wards was reintroduced on the 16th of March 1878 and referred to a Select Committee. This Bill will in all probability be entirely recast and simplified on the model of recent legislation for the North-West Provinces. Lastly, a Bill to provide for the settlement of the rent of lands on the application of landholders or ryots was brought into the Council on the 23rd of March 1878 and referred to a Select Committee, who have invited the opinions of the local officers on its provisions. By this Bill the Collector is empowered, on the application of landlords or tenants, to order a settlement of rent to be made of any lands being not less in extent than a mouzah. The Deputy Collector is to make the settlement, and the rent fixed by him, when confirmed by the superior revenue authorities, is to remain in force for a period of ten years, unless altered by decree of a civil court. When rent is enhanced in the course of settlement proceedings, the principle contained in Bengal Act III of 1878 will be applicable, i.e. the rent will be deemed to have been correctly enhanced until the contrary is proved, and a suit to contest the liability to pay the enhanced rent must be instituted within three months of the notice of enhancement.

On the 29th December 1877 the President made a statement of the course of legislation, in which he announced that the Irrigation Bill, the consideration of which had been postponed, would not be proceeded with for the present, as there appeared every likelihood of the voluntary system bringing in the necessary return on the State outlay in course of time. He also stated that a Bill to provide a more summary procedure for the recovery of arrears of uncontested rent was under the consideration of the Government. This Bill has since been referred to the Government of India for introduction into the Council of the Governor-General for making laws, and regulations, as it involves matters beyond the competence of the local Council.

Police.

THE total budget grant for the year for the police of the Lower Provinces, including the cost of the Chittagong frontier police and the Government contributions towards the municipal and railway police, was Rs. 38,42,647. This was exceeded by Rs. 16,115 in consequence of special charges incurred in repairing damage caused by the cyclone and unavoidable delay in effecting reductions in the Chittagong frontier police. There was a net decrease in the force of ten inspectors, five sub-inspectors, three head constables, 113 constables, one European constable, and two mounted constables. In some cases the services of the men were dispensed with in pursuance of a general scheme of reduction; in others in consequence of the introduction of the warder system in jails. The average cost of the purely civil police throughout the province was about seven pies per head of population. In Behar the cost per head was 5·2, in Bengal proper 7·5, in Orissa 10·1, and in Chota Nagpore 10·4 pies. The proportion of police to area was 1 to 7·2 square miles in Orissa, 1 to 8 in Bengal, 1 to 10·7 in Behar, and 1 to 21·2 in Chota Nagpore. The proportion to population was 1 to 2,365 in Orissa, 1 to 2,510 in Chota Nagpore, 1 to 3,716 in Bengal, and 1 to 4,958 in Behar.

During the past year the attention of Government was drawn to the large and increasing expenditure on account of the police, and the unequal distribution of the force in different districts. The Inspector-General took up the question with a view to a thorough revision of the allotments of the force to the several districts, and suggested such reductions as could be effected without sacrificing efficiency, and with due regard to the actual requirements of the administration. The changes proposed included the reduction of the lightest districts in Bengal from the charge of a District Superintendent to that of an Assistant Superintendent, and the abolition of the appointments of 60 inspectors, 10 sub-inspectors, and a large number of head constables and constables. The revisions were proposed after careful inquiry and consultation with the local officers, and received the full approval of Government. While effecting a saving of Rs. 1,65,048 per annum, they will in no way result in inconvenience to the public service.

These reductions, so far as the subordinate officers and men of the police are concerned, came into effect on the 1st April 1878, and the services of 60 inspectors, 10 sub-inspectors, 131 head constables, 529

native constables, and one European constable, have been dispensed with since the close of the year 1877-78, the pensions or gratuities to which they are entitled under the rules being granted to them. The reductions in the rank of District Superintendents will be made as vacancies occur. Since the opening of the current financial year the Inspector-General has effected a further saving of Rs. 1,152 per annum. The total saving to Government on account of revision in the police allotments amounts therefore to Rs. 1,66,200 per annum.

There was some little variation in the strength of the municipal police. There was an increase of one sub-inspector and 21 head constables, and a decrease of two European and 76 native constables. The percentage of casualties was no less than 26·6, against 23·4 in 1876. Dismissals were most numerous in the 24-Pergunnahs, Howrah, Dacca, and Hooghly. No fewer than 222 constables and three head constables were dismissed in the first-named district. Resignations numbered 123 in Howrah, 100 in the 24-Pergunnahs, 52 in Dacca, 33 in Patna, and 31 in Burdwan, and desertions were 38 in Burdwan and 33 in the 24-Pergunnahs.

With the exception of the Commissioner of Chittagong, no Commissioner has taken objection to the working of the village Chowkidari Act. In the Presidency, Rajshahye, Dacca, Patna, and Bhagulpore Divisions the Act is reported to have worked on the whole satisfactorily. Purneah and Sarun appear to be the only districts where comparative failure has resulted, and in Sarun this seems to have been the fault of the local officers. The main object of the Act, to provide a body of fairly paid rural police, has been attained. Details may require amendment in the light of experience, but the elements of success have been fairly secured.

Casualties in the railway police numbered 32·8 per cent. during the year, against 26 per cent. in 1876, and admissions to hospital were 179·9 per cent., against 145. The road patrols have been fairly effective. In Nazareebagh a number of new posts were established during the year. The occurrence of several recent mail robberies on the Gya road appears to show that the patrolling arrangements in that district are still somewhat defective. The number of parties of punitive police quartered on disturbed villages during 1877, was 30, against 12 in 1876. Of these, 21 were rendered necessary by the turbulence of zemindars and ryots in Backergunge, and four were required in Noakholly. In Shahabad the quartering of punitive police has been attended with specially beneficial results in the suppression of robberies. There were 152 large fairs specially attended by the police. Only 132 petty offences were reported to have been committed in connection with them, and 36 convictions were obtained in 95.

In the regular police 99 per cent. of the inspectors, 98 per cent. of the sub-inspectors, 85 per cent. of the head constables, and 37 per cent. of the constables, can read and write, and a large number of head constables and constables are under instruction. Casualties numbered 13 per cent. of the entire strength. In 1876 the percentage was also 13, in 1875 it was 11·5, and

in 1874, 13·1. Dismissals were most numerous among the railway police (48), in the 24-Pergunnahs (42), Moorshedabad (34), and Rungpore (26); and resignations in the 24-Pergunnahs (97), railway (82), Moorshedabad (66), Hooghly (56), and Jessore (52). The general health of the force was bad during the year. Admissions to hospital were 63·7 per cent. of the strength, against 49·5 in 1876. In the Chittagong Hill Tracts, Rajshahye, and Dinagepore the number admitted to hospital considerably exceeded 100 per cent. The mortality was highest in Dinagepore, Maldah, and Moorshedabad, and lowest in Gya, Monghyr, and Shahabad.

The total number of punishments inflicted on members of the force was 4,792, against 4,463 in 1876 and 4,189 in 1875. There was an increase in the number of punishments and re-wards. convictions under the Penal Code and a decrease in those under the Police Act; while departmental punishments numbered 4,209, against 3,832 and 3,589 respectively in the two previous years. For the third year in succession the railway, Gurjhat, and Noakholly police show the highest percentage of punishments. Departmental punishments were also very numerous in Cuttack and Gya. Altogether one sub-inspector, six head constables, eight constables, and one chowkidar, were punished for torture or maltreatment of prisoners, and seven head constables, twenty constables, and one chowkidar, were convicted of extortion. On the other hand there were very many instances of special good conduct, and no less than 736 men were added to the list of the wearers of good-conduct rings. Besides these, 20 inspectors, 216 head constables, and 812 constables, were specially rewarded for distinguished good service. The fixed proportion of foreigners in the force of each district was in many cases exceeded, and it was found necessary to direct that for the purposes of enlistment the term foreigner shall be applied only to natives of other provinces than that in which police service has to be performed. In many instances it was found impossible to recruit the force under the previous orders, which included residents of other divisions in the term foreigner.

The total number of cognizable cases reported during the year outside Calcutta and the suburbs was 108,989, against 117,559 in 1876 and 120,838 in 1875. If cases declared false by Magistrates are deducted, the numbers are 94,362, 95,747, and 94,783 respectively. The decrease in the number of cases reported in 1876 and 1877 appears in due proportion under all heads. Out of the difference of 2,071 under "other cases" no less than 2,056 are accounted for by the falling off in the number of prosecutions for bad livelihood. Notwithstanding this large reduction in the number of these cases there was a decrease of no less than 4,683 in the number of reported offences against property.

The number of cases declared false was 14,627, against 21,812 in 1876 and 26,055 in 1875. In some districts the decrease was very striking, while in only four was there an increase. The percentage of false cases to cases reported fell from 30 to 2 in Beerbhoom, from 37 to 8 in Bhagulpore, from 25 to 8 in Dinagepore, from 23 to 8 in Dacca, and from 14 to 2 in Bankoora. Mymensingh, which had 52 and 55 per cent. of false cases in 1875 and

1876, and Noakholly, which had 30 and 32, had only 10 and 5 per cent. respectively in 1877. The districts with the highest percentage of false cases were Backergunge (34), Cuttack (32), Balasore (32), Rungpore (29), Pooree (23), Burdwan (21), and Purneah (19); and in all these districts the number of prosecutions instituted was very low. Backergunge had only 55 out of 1,690, Cuttack 11 out of 777, Balasore 32 out of 593, Rungpore 9 out of 813, Pooree 12 out of 818, Burdwan 39 out of 786, and Purneah 24 out of 420. In those districts, on the other hand, where the percentage of false cases was lowest, the proportion of prosecutions was generally high. Thus Bhagulpore had 84 prosecutions out of 126 cases, Bankoorā 19 out of 23, Monghyr 54 out of 193, and Noakholly 50 out of 116. The percentage of cases not inquired into was very high in Gya (33), Gurjhats (28), Manbhoom (27), Bogra (21), Monghyr (21), and Bankoorā (16). In most of these districts the results of the police action in such cases as were taken up were indifferent. In Patna, where inquiry was only refused in 15 cases out of 4,470, the police were far more successful than in the neighbouring district of Gya, where no investigation was attempted in 1,280 out of 3,845 cases. The percentage of convictions to arrests was only 59 in Gya, against 72 in Patna.

The total number of cases under inquiry during the year was 110,632. Of these, 14,627 were declared false and 8,595 were not inquired into. In 33,266 out of the remaining 87,410, or 38.05 per cent., convictions were obtained. The percentages of convictions in 1875 and 1876 were 38.9 and 39.2 respectively. Of 94,318 persons arrested, 55,977, or 59.3 per cent., were convicted, against 59 per cent. in 1876. The convictions and acquittals of persons actually put on trial compare unfavourably with those of the previous year. Convictions were 61.6 per cent. against 62, and acquittals 34.1 per cent. against 33. The percentages of convictions to arrests in the different divisions were, Burdwan 66, Chittagong 66, Patna 63, Presidency 61, Rajshahye 61, Bhagulpore 61, Chota Nagpore 60, Orissa 58, Dacca 57. The best results were obtained in Howrah (79), Patna (72), and 24-Pergunnahs (71). Less than half the number arrested were convicted in Backergunge (43), Mymensingh (46), Sarun (47), Balasore (47), Gurjhats (48), Jessore (48). The statement showing the results of investigations by the police is very unfavourable to Rungpore, Backergunge, and Pooree, where only 26.5, 27.2, and 29.7 respectively of cases investigated were successful.

Of prisoners committed to the Sessions 39 per cent. were acquitted,

Committals—Appeals. against 36.9 in 1876. More than half the total number of acquittals occurred in cases of serious offences against the person. Acquittals in cases of this class were most numerous in the 24-Pergunnahs, Tipperah, Dacca, Nuddea, Backergunge, Rajshahye, Noakholly, Rungpore, and Maldah. Only three of these are jury districts. The largest percentages of acquittals in Sessions trials were in Pooree (85), Gurjhats (76), Southal Pergunnahs (67), and Sarun (66). Of 15 districts in which one half or more of the prisoners committed were acquitted, only four (Howrah, 24-Pergunnahs, Patna, and Moorshedabad) are jury districts. The most important practical point connected with this

subject is the apparent want of good system in the conduct of prosecutions before the Court of first instance or the Court of Sessions or appeal. In only 196 of 2,096 cases in which appeals were preferred was Government represented before the Appellate Court; while of 979 cases tried by the Court of Sessions only 40 were conducted before the committing Magistrate, and only six before the Sessions Court by the District Superintendent or his Assistant. As regards appeals in criminal cases to the High Court, there has often been neglect in bringing the main facts of important cases prominently to the notice of the Legal Remembrancer; and orders have been passed that Magistrates should communicate much more freely with the Legal Remembrancer, so that the Deputy Legal Remembrancer may be in a position to watch and argue all important criminal appeals to the High Court.

The gross value of the property stolen during the year was Rs. 9,67,762, and of property recovered Rs. 3,01,451. The recoveries were thus 31·2 per cent. of the amount stolen. In the previous year the percentage was 31·8. Bankoora still sustained its position at the bottom of the list. The average percentage of recoveries in this district for the past three years has been five, or less than half the lowest percentage in any other district. Furreedpore and Dacca showed results which are only tolerable when compared with those of Bankoora. The average percentages of recoveries in these districts for the past three years were 13 and 14 respectively.

The following statement shows the number of true cases reported under each heading during the past six years:—

		1872.	1873.	1874.	1875.	1876.	1877.
Class I.	Offences against the State and public tranquility	3,120	2,929	2,606	2,755	2,700	2,818
" II.	Serious offences against the person	4,018	4,392	3,905	4,184	4,108	4,141
" III.	Serious offences against person and property, or against property only	20,210	21,531	28,615	23,957	22,280	20,667
" IV.	Minor offences against the person	3,994	4,126	6,495	9,862	9,073	8,812
" V.	Minor offences against property	38,767	40,247	43,343	38,093	38,832	41,096
" VI.	Other offences not specified above	14,497	13,765	13,272	15,206	18,257	16,344
	Other special laws	599	873	951	726	495	480
	Total	85,205	90,882	99,187	94,783	95,745	94,361

Under class I the results of prosecutions at the Sessions were very unsatisfactory, only 166 cases having resulted in convictions against 280 in which acquittals ensued. The Mymensingh police did good service in bringing to justice a gang of coiners. Under rioting and unlawful assembly there was an increase of 174 cases. There was also a considerable increase in Midnapore owing to a change in the procedure under which cases which would ordinarily fall under the criminal trespass section were treated as cases of organized illegal assembly. In this district there was an increase under this head of 79 cases, though only one was of any importance. As usual, the Dacca Division heads the list. The first five districts were Backergunge (199), Mymensingh (196), Furreedpore (157), Dacca (127), Tipperah (123). The results were unsatisfactory in all of these, with the exception of

Dacca, where 72 cases resulted in convictions. In Furrædpore, Mymensingh, and Backergunge the results of trials were extremely unsatisfactory. Backergunge and Mymensingh had each about four riots a week, and in the former district one person was murdered by rioters every month. The police returns of the year showed clearly that the criminal administration of Backergunge had been allowed to fall into great disorder, and that there was a want of really vigorous and intelligent control.

The number of serious offences against the person ascertained to have occurred was 4,141, against 4,108 in 1876. Convictions were obtained in 39·4 per cent. of these, against 39·6 in 1876; and the percentage of convictions to arrests was 44·5, against 44. There were 315 murders, against 342 in 1876 and 302 in 1875. The want of success in dealing with these cases was most deplorable, convictions being obtained in only 30·4 per cent. of the cases, against 41·2 in 1876. The percentage of convictions to arrests was 25·1, against 27·4. Of 729 persons whose cases were disposed of by the Magistrate 546 were committed to the Sessions, and of 436 of these, regarding whom a decision was arrived at during the year, 228 were convicted at the Sessions and 208 were acquitted. These results point strongly to the necessity of greater care in the conduct of prosecutions before the Sessions Courts. The results were most unfavourable in Midnapore, Howrah, Jessore, Dacca, Tipperah, and Noakholly. In the Presidency Division there was a marked decrease in the number of murders, only 23 occurring, against 49 in the previous year. Of these, however, only five were detected, and only 10 out of 61 persons arrested were convicted. The Dacca Division had no less than 99 murders, of which 44 occurred in Backergunge. The condition of this district is such that it has been found necessary to considerably strengthen the administrative staff, and special and minute attention is being paid to the progress of crime. The police of the Patna Division were strikingly unsuccessful in dealing with this class of offence. Of 28 cases only 10 resulted in conviction, and only 12 out of 85 persons arrested were punished. In Gya only one out of seven cases, and in Patna only two out of eight, were successfully prosecuted, while Gya shows only one conviction and Patna only two out of 19 and 20 persons arrested respectively. There were 199 cases of culpable homicide, against 203 in 1876. Convictions were obtained in 93 cases, against only 187 persons out of 486 arrested. There were altogether 40 cases in Hooghly, Howrah, Jessore, Dinapore, Bogra, Pubna, Chittagong, Sarun, Bhagulpore, Cuttack, and Pooree, but there were no convictions in any of these districts. Under grievous hurt there were 634 cases, against 626 in 1876. The Patna Division shows an increase from 139 to 166, and a satisfactory increase from 125 to 185 in the number of persons convicted. The results were most satisfactory in the 24-Pergunnahs, where 13 out of 14 cases resulted in convictions. Cases of administering stupefying drugs were chiefly reported from the Patna and Chota Nagpore Divisions. There were 733 cases of hurt by dangerous weapons, against 729 in 1876; and only 424 persons were convicted, against 412 acquitted. In Rajshahye, Sarun, Pooree,

and Hooghly the results were most discreditable to the local police.

As regards minor offences against the person, the number of trials was 8,812, against 9,073 in 1876. In Moorshedabad there was gross failure in dealing with this class of crime. Convictions were only obtained in this district in 62 out of 385 cases. There was a decrease in the number of cases in the Rajshahye Division.

There were only 138 cases of dacoity, against 154 in 1876 and 254 in 1875. Convictions were obtained in 35 cases only, against 186 persons out of 562 tried.

Offences against property. The Magistrates committed to the Sessions 72 per cent. of the prisoners placed before them, but the Sessions Courts only convicted 53·5 per cent. of those committed. The decrease was most marked in the Burdwan and Presidency Divisions, which had 30 and 9 cases respectively, against 45 and 17 in 1876 and 64 and 31 in 1875. Three districts of the Bhagulpore Division (Mouhlyr, Bhagulpore, and Maldah) were entirely free from dacoity, and Purneah, in which the crime was once rife, had only four cases. In the Dacca Division there was an increase of 16, in Chittagong of seven, in Orissa of one, and in Chota Nagpore of six cases. The decrease in dacoities in Midnapore was very satisfactory, and reflects credit on the local police. In Hooghly there was a large increase, and only three cases out of 11 resulted in convictions. In Furreedpore dacoities increased from five to 10, and in Backergunge from three to 13. Nine out of the 12 river dacoities of the year were committed in these districts. In Furreedpore convictions were obtained in only three cases against nine persons, while no less than 28 were acquitted. In Backergunge only two cases resulted in conviction; and it appears that none of the river dacoities in this district were detected. There were, however, nine other dacoities, and of these only two were prosecuted to conviction. The Chittagong Hill Tracts had seven cases, though none were reported in the previous three years. Only one was detected. In Gya there were seven cases, against three in 1876, and there were no convictions. Two of the cases were mail robberies, and it was necessary to depute one of the Deputy Inspectors-General to Gya to devise special measures for the repression of this class of crime. Altogether the working of the Gya police was unsatisfactory. In Chota Nagpore there were 14 cases, against eight in 1876; and of these 11 occurred in Hazareebagh. Only one case was detected. These cases, it is said, were chiefly highway robberies. There were also 16 cases, which, owing to the number of persons engaged being less than five, were formally shown under the head of robbery. Of these only three were detected. Both in Hazareebagh and Gya there appears to have been a regular outbreak of highway robbery, with which the police were quite unable to deal.

There were 144 cases of robbery, against 141 in 1876, and convictions were obtained in 53 cases in each year. Of 277 persons tried in 1877, 116 were convicted, against 100 out of 206 in 1876. Under serious mischief there were 637 cases, against 811 in 1876. Convictions, however, were obtained in 153 cases only, against 203; and 231 persons only were convicted out of 651 tried, against 421 out of 919

in 1876. The decrease in the number of convictions was most marked in the Presidency Division. Jessore had only three convictions out of 21 cases, and Moorshedabad only 8 out of 42. In the Patna Division there were 71 cases, against 40 in 1876; and convictions were obtained in 40 cases, against 57 out of 76 persons tried. In the 24 Pergunnahs and Pubna prosecutions were very successful, convictions being obtained in the former district in 35 cases out of 55, and in the latter in 23 out of 34. There was a slight decrease in the number of cases of arson, which is the characteristic crime of the Chittagong Division. The results of police inquiry were not good, but the crime is very difficult of detection.

Under the head of minor offences against property 50,539 cases were reported, against 56,331, the average of the previous five years. The most marked fluctuations in crime are observable in the returns for Noakholly, the total number of offences of this nature reported during the past three years being—

1875.	1877.
779	1,098
	1,428

The following table shows the fluctuations in cases of burglary and house-trespass :—

	1875.	1876.	1877.
Cases reported ...	79,015	75,522	71,163
„ declared false ...	18,767	16,071	10,975
Total true cases ...	60,278	59,451	60,188
Not inquired into ...	10,484	9,589	7,985
Inquired into ...	49,794	49,862	52,203
Convictions in cases ...	13,297	13,076	13,435
Persons tried ...	40,013	40,045	41,430
„ convicted ...	21,926	22,261	22,620
„ acquitted ...	16,227	15,969	17,003

The percentage of true cases in which convictions were obtained was about 22 in each of the past three years. In Hooghly, Sarun, Gya, Durbhunga, Bankoora, and in the Bhagulpore Division the failure of the police in dealing with these cases was particularly marked. In Hooghly the percentage of true cases detected was only 3·4, in Sarun 4, in Gya 5·3, in Durbhunga 5·5, in Bankoora 5·7, and in the Bhagulpore Division 5·5.

The operations of the police in cases of ordinary theft and cattle theft are shown in the following statement :—

	1875.	1876.	1877.
Cases reported ...	38,684	37,396	35,735
„ declared false ...	12,235	10,894	7,411
Total true ...	26,449	26,412	28,333
Not inquired into ...	2,294	2,225	2,184
Inquired into ...	24,155	24,187	26,149
Convictions in cases	8,298	8,148	8,600
Persons tried ...	22,299	22,397	23,919
„ convicted ...	12,124	12,668	13,436
„ acquitted ...	8,768	8,532	9,371

On the one hand there was a large decrease in the number of cases reported owing to the removal of civil cases from the statement; on the other there was a considerable reduction in the number of cases accepted as false. The results of investigation, though more favourable

than were obtained in burglary cases, were not satisfactory. Convictions for theft were very satisfactory in Howrah, and very unsatisfactory in Bankoora and Hooghly. The action of the Monghyr police in cattle-theft cases was specially commendable. There was a marked increase in thefts of this class in Shahabad, for which no explanation was given. Convictions were obtained in 1,492 out of 2,017 true cases of receiving stolen property investigated, against 1,526 out of 2,086 in 1876. These cases are generally taken up by the police after the property has been actually found.

The number of persons tried for bad livelihood during the year was 3,173, against 5,154 in 1876. Of these only 2,184 were convicted, while 937 were acquitted. In other words, in cases where only general bad repute, and not specific criminality, had to be proved, no less than 32 per cent. of the persons sent up by the police were declared by the judicial officers to have vindicated their character. The results were specially deplorable in Backergunge, Furreedpore, Jessore, Mymensingh, Hooghly, and Chittagong. Backergunge had 55 acquittals, against 41 convictions; Furreedpore 47, against 46; Jessore 65, against 68; Mymensingh 33, against 25; Hooghly 24, against 38; and Chittagong 11, against 18.

In non-cognizable crime there was a decrease from 98,287 cases in 1876 to 95,367 in 1877. In the previous year, however, the increase was exceptional, and the number of cases in 1875 was actually less than in 1877. The fluctuation is to some extent explained by the action of the Magistrate of Dinapore, who in 1876 proceeded judicially against a very large number of chowkidars who are ordinarily dealt with departmentally. In the Dacca Division there was a decrease in the number of offences relating to marriage, but this decrease was not attributed to the working of the registration law. The number of persons summoned by the Magistrates was 100,687, against 103,830; and of those who appeared 72,745, against 75,691. The percentage of convictions was 41 and 57, against 43 and 59 respectively. The number of cases in which the agency of the police was employed was 5,670, against 4,964 in 1876. This is not satisfactory, for it is very undesirable that the time of the police should be occupied in making inquiries in petty cases when they have so much to do in more important departments. In Backergunge, where serious crime of every class was rampant, no less than 858 non-cognizable cases were made over to the police for inquiry. This could not have occurred had the Magistrate exercised proper care in supervising the proceedings of his subordinates. In Dinapore and Noakhally, two districts where the general administration was also unsatisfactory, the police were employed in 369 and 317 non-cognizable cases respectively. In Burdwan the number was 264, and in Cuttack 225, while in Singbhoom 20 per cent. of the non-cognizable cases instituted were thus dealt with. There were again variations in the proportion of persons convicted of non-cognizable offences in the different districts. In Bankoora, Beerbhoom, and Midnapore the proportions were 1 to 2,544, 1 to 2,596, and 1 to 2,588 persons respectively; while in the three other districts of the Burdwan Division (Burdwan, Hooghly, and Howrah) they were 1 to 852, 1 to 663, and 1 to 527 persons respectively. The large proportion in the

Sonthal Pergunnahs, which was noticed in last year's Administration Report, still continues. No less than 1,741 persons were convicted in this district, against 597, or only 1 in 2,872 in the adjoining regulation district of Bhagulpore. In Mozufferpore the proportion was only 1 to 3,090; while in Durbhuniga, which was formerly a part of the same district, it was 1 to 935.

The question of the supervision of criminal tribes received attention during the year. The Mugheya Dondes on the Nepal frontier at one time gave considerable trouble, and the adoption of an expensive scheme for their permanent repression was urged on Government, but it was not thought desirable to embark on such a project until it should be shown that ordinary resources had been exhausted. The Chumparun police were reinforced by a few men from the neighbouring districts, a complete system of patrols was established, and the active co-operation of the Nepalese Government was solicited and obtained. Since the close of the year a report has been received that the measures adopted have been completely successful. Mr. Knyvett, District Superintendent of Chumparun, received the special commendation of Government for his judicious and vigorous action in dealing with these marauders.

There were 3,042 re-convictions recorded during the year, against 2,435 in 1876. This subject is receiving due attention from police officers, but it is obvious that many Magistrates entirely fail to realize the actual criminality of persons who, after undergoing judicial trial and punishment for one or more offences, deliberately commit crime again. To inflict petty sentences in such cases is to reduce criminal procedure to a mere form; yet in many of the cases reported by the Inspector-General sentences appear to have been passed on hardened criminals which would scarcely suffice on a first conviction.

No change was made during the year in the strength of the police in Calcutta and either in the town of Calcutta or the suburbs. There were 129 dismissals, against 148 in the previous year. The list includes one inspector, 15 European constables, and six native officers. Desertions numbered 149, against an average of 67 during the four preceding years.

The returns for the past year show a large increase in the number of cases reported in the town and suburbs. The aggregate number for each of the past three years was—

1875.	1876.	1877.
37,763	35,733	41,586

The increase, however, represents no sensible advance in crime. The great bulk of the difference in the figures for 1876 and 1877 is represented by the multiplication of conservancy cases, of which there were 16,491 in the past year, against 10,071 in 1876. The increase in cognizable crime is represented by 1,022 cases, of which no less than 553 were miscellaneous offences under the Port, Shipping, and other Acts. The number of cognizable offences under the Penal Code was 6,260, against 5,593. Gauged by the number of offences of this class, the criminality of the town and suburban population was 1 to 121 and 1 to 150 persons respectively, against 1 to 126 and 1 to 170 in the previous year. It is noteworthy that of eight murders which

occurred in Calcutta and the suburbs seven were murders of women. Of 38,029 persons arrested 31,021 were convicted. In the previous year there were 25,861 convictions on 35,368 arrests. In cognizable cases under the Penal Code the action of the police appears to have been judicious. Conviction followed arrest in 67 per cent. of the cases, against 54 per cent. in 1876. The number of cases in which property was stolen was 2,725, against 2,565 in 1876; and property was recovered in 1,812, against 1,553. The percentage of property recovered was 50·71 in the town and 40·96 in the suburbs. The number of false cases was satisfactorily small, only 2·27 of the number of cognizable cases reported.

Town.—The number of cognizable cases in the town was 15,185, against 14,663 in 1876. Serious offences against the person increased in number from 121 to 154. Of these no less than 90 were assaults on public servants, against 58 in the previous year. The average of the previous five years was 91. There were five cases of murder, against four in 1876. Convictions were obtained in three cases, in one the accused evaded arrest, and in the last no clue was obtained. The undetected case was one of those cowardly outrages which occasionally disgrace Calcutta, in which native prostitutes are murdered by their visitors for the sake of their ornaments. There were five cases of attempt at murder. All were detected, though two trials resulted in acquittals. In two cases the offenders were insane when they committed the crime. Seventeen cases of grievous hurt occurred, of which nine, including all the cases committed to the High Court, resulted in convictions. There were two cases of petty robbery on the *maidan*, the work of a party of vicious boys. In burglaries there was a satisfactory decrease from 102 to 78 cases; property was carried off in 58 cases only. The number of cases detected was 41 to 25 in 1876, and of convictions 41 to 32. The value of the property stolen showed a decrease from Rs. 11,595 to Rs. 11,311, and that of the goods recovered a large increase, from Rs. 2,995 to Rs. 4,690. These results are creditable. In thefts also the action of the police was satisfactory. The number of cases was 1,989, against 1,961 in the previous year; but the number of cases detected was 977, against 821, and of persons convicted 1,173, against 935. The river police were successful in 213 out of 215 cases. The Commissioner attributes the decrease in burglaries to the effect on the criminal classes of the enhanced original powers conferred on the Police Magistrates by the Presidency Magistrates' Act. There were a few judicious prosecutions for bad livelihood, and the result was observable in a considerable decrease in the number of persons arrested for lurking in the streets unable to give a satisfactory account of themselves. Offences under the Shipping Acts show an increase from 374 to 551, the result of the expansion of the trade of the port. Out of 2,695 persons prosecuted for cruelty to animals, only 29 were discharged.

Suburbs.—The number of cognizable cases was 3,194, against 2,749 in 1876. There was a decrease in the number of offences against property, but a large increase in public nuisances and street offences. There were three murders, all of women, and in one case the perpetrator was not detected. In another case the murderer was a lunatic, who

had escaped from the Dullunda Asylum in 1874; in the third the murderer committed suicide before the police arrived. The offenders in the only case of attempt at murder which occurred were convicted. There were 13 cases of grievous hurt, in 10 of which convictions were obtained. Three cases of kidnapping children for their ornaments were successfully investigated, and the offenders were brought to justice. There were 146 cases of burglary, against 122 in 1876. Property was taken in 80 only, and 36 cases were detected. These results were not so successful as those attained in the town. There was a considerable decrease in thefts, from 841 to 634, and 343 cases were detected, against 335, in 1876.

The number of cases of suicide (53) was the same as in 1876. Of these, 25 were caused by hanging and 11 by overdoses of opium. Accidental deaths numbered 253, against 239. Street accidents caused 19 deaths in the town. The cause is probably to be found less in the narrowness of the streets and the absence of footpaths than in the notorious recklessness of native drivers; and the attention of the Commissioner of Police was called to the subject. Drowning shows an increase of 29 cases. Of the 59 men drowned in the river no fewer than 41 were European sailors. Measures have been taken to warn captains of the danger of allowing their men to work at the ship's side in the river without taking proper precautions for their safety. Instructions have also been issued to the police to prevent sailors from getting into small country-boats while in a state of drunkenness.

The statistics of the import trade of Calcutta in arms and ammunition during the past five years show a large decrease since 1873 in the number of rifles, guns, and pistols, with little variation in the quantity of gunpowder, shot, and percussion caps introduced. The transport both of arms and ammunition to Assam and the frontier districts diminished considerably during the past year. This is doubtless the result of increased care in granting passes on the part of the local authorities. Sanction has recently been given to the employment of a special inspector in Calcutta to supervise and examine the books kept by persons holding licences under the Arms' Act.

It was not found necessary during the year to enforce the responsibility of owners and consignees of horses for the removal of the persons who are brought up from Australia in charge of the animals. Altogether 36 persons were declared vagrants, against 30 in 1876. Of these, 31 were admitted into the Presidency Workhouse. Nine vagrants were deported, and in addition to these 14 distressed Europeans were sent at the public charge to Melbourne and London. Only one of these was a sailor. The amount expended on this account was Rs. 2,918. Of 245 persons admitted to the Alms House, 33 were deported at the cost of the District Charitable Society, and employment was found for 30. A scheme for the amalgamation of the Alms House and the Workhouse, which will, it is hoped, prove economical and efficient, and at the same time have the effect of discouraging professional mendicancy among Europeans and Eurasians, is now under the consideration of the Government.

Criminal Justice.

THE total number of persons under trial before the High Court in its ordinary original jurisdiction during the past year was 102, of whom three were discharged without trial, 16 were acquitted, and 81 convicted. Of the 81 persons convicted, two were sentenced to death, nine to transportation, and 70 to imprisonment with or without fine.

Altogether 2,428 persons appealed to the High Court or applied for revision under section 296 of the Criminal Procedure Code, with the following result:—
 High Court, Appellate Jurisdiction. Sentence confirmed, 1,236; sentence modified, 127; sentence reversed, 691; proceedings quashed, 30.

The total number of persons committed to the Courts of Sessions for trial during the year, including those remaining at the end of 1876, was 3,255. Of these, 11 were discharged without trial, 1,179 acquitted, 1,710 convicted, and 334 remained at the close of the year. Of the 1,710 persons convicted, 81 were sentenced to death, 293 to transportation, and the remainder to imprisonment with or without fine.

The total number of persons who appealed to the Courts of Sessions during the year was 6,137. The appeals of 1,453 of these were rejected, while the sentences of 2,512 were confirmed, of 468 modified, and of 913 reversed. In 15 cases the proceedings were quashed, in 58 further inquiry was ordered, and in 309 reference was made to the High Court for revision of sentence.

The total number of persons under trial during the year before the courts of the various Magistrates of Lower Bengal, and the results of those trials, are shown below:—

Number of persons under trial	...	...	...	162,914
Ditto discharged without trial	...	...	...	22,848
Ditto acquitted	...	...	...	35,474
Ditto convicted	...	...	...	96,981
Ditto committed	...	...	...	2,879
Ditto otherwise disposed of	...	...	...	289
Ditto remaining at end of year	...	...	...	4,440

Of the 96,984 persons convicted, 24,632 were sentenced to the undermentioned terms of imprisonment, and the remainder to fine and whipping:—

Not exceeding 15 days	...	...	...	...	...	5,828
Ditto 6 months	...	...	...	...	...	14,879
Ditto 2 years	...	...	...	...	...	3,831
Ditto 7 „	...	...	...	...	...	94

The total number of witnesses who attended the different Courts during the year was 406,380. Of these 393,157 were examined by the different Magistrates, 12,683 by the Sessions Courts, and 510 by the High Court in its ordinary original jurisdiction.

The number of convictions that were followed by imprisonment was smaller during the past year than in any year since 1873. The returns show an increase in the number of convicts from 17,027 on the 1st February 1877 to 17,739 on the 1st August, and then a decrease to 17,633 on the 1st September, 17,463 on the 1st October, 17,130 on the 1st November, and 16,847 on 1st December. This falling off was due to the operation of the orders of Government regarding the wholesale imprisonment of persons suspected of bad livelihood by the police. Those orders only came into effect in September. The returns of the Shahabad, Dacca, Rungporo, Monghyr, Gya, and Purneah districts showed that though only 552 persons were imprisoned for bad livelihood, against 1,155 in 1876, the number of criminals admitted into the jails and lock-ups of these districts decreased by 890. An attempt has been made by several Magistrates to explain the decrease of admissions by attributing it to the prosperity of the agricultural classes owing to the high prices of grain and good crops; but though these causes might tell in favour of the freedom from crime in the agricultural classes, they would have the opposite effect on the non-agricultural classes, who would be placed in a position of increased temptation from high prices, and the criminals open to temptation arising from want of money belong more to the classes who do not hold land and cultivate crops for themselves than to those who do. As a matter of fact, there was an increase in the number of prisoners in jail during the first three quarters of the year; the jail population, which had been decreased by the releases of the 1st January from 19,291 to 17,027 on the 1st February, rose again by the 1st August to 17,739, and again decreased to 16,847 on the 1st December. It was in the latter part of the year that the orders were issued directing the discontinuance of oppressive proceedings on the part of the police against bad characters. To some extent, no doubt, the decrease of admissions into jail may fairly be attributed to good crops and high prices; but the returns of the year showed that a decrease of prosecutions for bad livelihood is compatible with a decrease of crime, and does not necessarily cause the enormous increase of serious crime which many Magistrates foreboded as the result of the change.

Of the total number of convicts admitted into jails during the year, 467 were under sixteen years of age, against 471 in 1876 and 413 in 1875. The Reformatory Schools' Act was on the 1st March 1878 extended to the province of

Bengal, including Beltar and Orissa, and the building, which was noticed in last year's Administration Report as under progress, was under Section 6 of the Act certified to be fitted for the reception of youthful offenders. Rules for regulating the periods for which Courts and Magistrates may send juvenile offenders to the Reformatory were sanctioned by the Government of India on the 13th March 1878, and a Superintendent was appointed for the Reformatory on a salary of Rs. 300 rising to Rs. 400 with free quarters. It is not anticipated that for some years there will be any marked improvement in the juvenile criminal population as a result of the working of the institution, as the majority of those who have now been sent there, although young in years, are confirmed habituals, who have been frequently in jail. Those who will benefit by it hereafter will be boys who have just begun a criminal career, or who have been removed at an early age from the association and influence of professional thieves and criminal parents.

The number of recorded re-convictions among prisoners during the year was 4,181, against 3,714 in 1876, 3,075 in 1875, 2,757 in 1874, 1,695 in 1873, and 1,377 in 1872. In Chumparun, Manbhoom, and the Presidency Jails the re-convictions were more than 26 per cent. of the total number of convictions; in Singbhoom they were 23, and in Rajshahye 22 per cent. In the European Department of the Presidency Jail there were no less than 146 re-convictions, against 41 in 1876, or 23·7 per cent. on the total number of convictions, against 11·1. In Buxar six re-convictions formed 30 per cent. of the whole number. In no other jail was 19 per cent. attained; and in Dacca, Backergunge, and Balasore the re-convictions were less than 7 per cent., in Mymensingh and Burneah less than 6 per cent., in Bogra less than 5, and in Julpigoree less than 4 per cent.

The total number of persons sentenced to whipping during the year was 3,423, of whom 2,959 were flogged for their first offences, and 464 for the second and subsequent offences. In 93 cases the number of stripes awarded was less than five, in 630 cases the number was under 10, in 847 under 15, in 856 under 20, in 481 under 25, and in 516 under 30. Sentences of whipping were inflicted on 366 persons under 16 years of age, and on 68 persons of 50 years of age and above. In 425 cases the offenders were sentenced to imprisonment in addition to flogging. Of the 3,423 persons flogged only 179 were able to read and write.

Daily average number of prisoners. The daily average numbers of each class of prisoners in jails and lock-ups respectively are shown below :—

Daily average number of prisoners.		1877.	1876.	Increase.	Decrease.
Civil	{ Jails	137	141	...	4
	{ Lock-ups	7	5	2	.....
Total		144	146	2	4
Under-trial	{ Jails	712	880	...	168
	{ Lock-ups	470	566	...	96
Total		1,182	1,446	...	264

Daily average number of prisoners.		1877.	1878.	Increase.	Decrease.
Convicted	{ Jails	17,173	19,833	...	2,660
	{ Lock-ups	354	393	...	39
	Total	17,527	20,226	...	2,699
State prisoners	...	2	2	...	.....
Total	{ Jails	18,024	20,856	...	2,832
	{ Lock-ups	831	967	...	133
	Total	18,855	21,820	...	2,965

The Presidency Magistrates' Act IV of 1877 came into force on the 1st April of that year, and arrangements were made for the establishment of two benches of Magistrates in the town of Calcutta under Section 9 of the Act. Under the rules as originally framed for the guidance of the benches, a bench was ordinarily composed of not less than three Magistrates, when they were all honorary Magistrates, or of two, when one of them was a stipendiary. The stipendiary Magistrates are *ex-officio* members of benches. The benches try such cases as are referred to them by either of the stipendiary Magistrates, provided that no cases triable by the High Court only may be so referred. The working of these benches was very successful. Two benches held regular sittings every week, and decided 134 cases in the first five months after they were established.

Sanction was given in March last to the formation of an independent bench, to sit once a week under the guidance of a competent chairman to be elected by the honorary Magistrates from among themselves. A list of honorary Magistrates competent to act as chairmen of the bench was prepared by the chief Magistrate and approved of by Government.

Under the provisions of Section 245 of Act IV of 1877 rules for regulating the payment of the expenses of complainants and witnesses attending criminal trials at the Courts of the Presidency Magistrates in the town of Calcutta were submitted to the Government of India in September 1877, and were sanctioned with certain modifications in August 1878. Under these rules the Presidency Magistrates are authorized at their discretion to order payment of their expenses to complainants and witnesses in the following cases:—(1) in prosecutions instituted or carried on by or under the orders of, or with the sanction of, Government, or any Judge, or Magistrate, or the Government Solicitor; (2) in all cases entered in column 5, schedule II, appended to Act IV of 1877, as non-bailable offences; (3) of witnesses in all cases in which they are compelled by the Magistrate of his own motion to attend under the provisions of Section 134 of Act IV of 1877; (4) of all witnesses summoned to appear and give evidence in the Presidency Magistrate's Court by virtue of any commission directed to such Court.

The rules provide that no payment shall ordinarily be made by Government to witnesses summoned at the instance of the complainant

under Section 142; but in any case in which it appears to the Magistrate that the prosecution is in furtherance of the interests of public justice, he may allow the expenses of witnesses. All disbursements on account of the expenses of complainants and witnesses are to be made by the Commissioner of Police, Calcutta.

The rules sanctioned by the Government of Bengal in May 1873,

to regulate the payment of the expenses of complainants and witnesses attending criminal trials at the High Court in its original jurisdiction, were revised during the year under review. Amended rules were drawn up by the High Court, and after the Commissioner of Police, by whom,

the payments have to be made, had been consulted, the rules were submitted for the approval of the Government of India. Certain modifications were suggested by the Government of India. The rules were not finally settled and sanctioned until September 1878. They provide for the payment at specified rates of the expenses of complainants and witnesses coming from the mofussil to attend criminal trials before the High Court on the original side—(1) in cases in which the prosecution is instituted or carried on by, or under the orders of, or with the sanction of, the Government, or any Judge, Magistrate, or other public officer, or in which it shall appear to the presiding officer to be directly in furtherance of the interests of the public service; (2) in all cases entered in column 5 of the schedule appended to the Criminal Procedure Code (Act X of 1872) as not bailable; and (3) in all cases in which witnesses are bound over to appear before the High Court.

Prisons.

THE leading feature in the statistics of the jail population during the year is a decrease in the numbers under almost every head. The year opened with 21,266 persons in jails and lock-ups, against 21,282 on the first day of 1876. During the year 68,750 persons were received, against 68,833 in 1873, 82,207 in 1874, 73,585 in 1875, and 75,221 in 1876. The number in the custody of the Jail Department on the last day of the year was 18,153, which is lower than the number in any year since 1871. The numbers for the past seven years are—

1871.	1872.	1873.	1874.	1875.	1876.	1877.
17,640	19,748	20,562	20,784	21,282	21,266	18,153

Though the number of convicts admitted was less by over 6,000 than in 1876, the number released was almost exactly the same. This is partly to be explained by the extraordinary releases on the 1st January 1877, when, on the occasion of the assumption of the imperial title by Her Majesty, the clemency of the Crown was extended to 3,079 convicts. Releases for good conduct and under the operation of the mark system were 2,870, against 545. The returns showed an increase in the number of convicts from 17,027 on the 1st February to 17,739 on 1st August, and then a decrease to 17,633 on 1st September, 17,463 on 1st October, 17,130 on 1st November, and 16,847 on 1st December.

Though there was a general decrease in the jail population, the number transferred was little less than in 1876, and considerably greater than in the previous year. This result was entirely due to the better working of the central jail system, and to the more punctual despatch of convicted prisoners from lock-ups to jails. The percentage of prisoners released on appeal was 3·3, against 3·7 in 1876. The Shahabad and Mymensingh districts showed no less than 12·08 and 10·71 respectively.

The percentage of convicts sentenced to imprisonment for one year and more to the total is 32·60, while the existing central jails can accommodate 41·9 per cent. As a matter of fact, however, the distribution of central jails is such that those situated in the western parts of the province cannot be fully utilized, while the Alipore Jail is always overcrowded. It has in consequence been found necessary to press on the conversion of the Dacca District Jail into a central jail, in order that the prisoners of the eastern districts may be brought within easy reach of a well regulated central jail.

The number of under-trial prisoners on 1st January was 1,259, against 1,452 on the first day of 1876. The number admitted was 31,567, against 34,743.

Under-trial prisoners.

The falling off in admissions corresponded very closely with the decrease in the number of convicts received. The number convicted was 16,161, against 17,658, or 47 per cent. of the whole number, against 46. Moorshedabad and Backergunge, again, show the longest average period of detention for prisoners under trial. The period was 29·20 days in Moorshedabad, 28·97 in Backergunge, 25·62 in Rajshahye, and 23·67 in Noakholly. The year opened with 155 civil prisoners, against 134 in 1876, and closed with 170, against 155.

Only Rs. 46,191 was spent during the year out of the Public Expenditure on build- Works grant of Rs. 1,42,400 for jail buildings.

The grant for the current year is Rs. 2,88,450 for jail buildings for 1878-79, and instructions have been issued that the new buildings so much required at Durbhunga, Chumparun, Ranchi, Chyebassa, and Bogra may be pushed vigorously forward.

The number of escapes in 1877 was the lowest on record. No escapes occurred from 29 jails. There were altogether only 116, against 134 in the previous year. Of these 16 occurred from the outside and 100 from the inside of the jail or lock-up building. Eighty-one of the fugitives were recaptured, as well as 21 prisoners who had escaped in former years. In 34 cases the jail establishment, in 47 the police, and in 35 both, were considered in fault. In respect of escapes Bengal compares very unfavourably with the Punjab and North-Western Provinces and Oudh. This is probably in part due to the inferior physique of the guards of the Bengal jails, and in part to the superior acuteness of the prisoners. It does not appear that the jails which have hitherto been considered the most insecure contributed unduly to the number of escapes. Twenty-two prisoners escaped from the Hooghly Jail, which is guarded by warders. This outbreak arose from an impression among the convicts that it was the intention of Government that the clemency of the Crown on the occasion of the declaration of the empire should be extended to them all, and that they were detained wrongfully by the jail authorities. There were altogether 39 escapes through jail gates. Some special rules drawn up by the Inspector-General of Jails for the management of double gates were approved of by Government during the year, and the introduction of the system of double gates cannot fail to have a good effect in preventing escapes. The extension of the warder system of guarding prisoners has recently been sanctioned by Government, and there can be no question of the advantages of a system under which the prisoners are guarded by men who are responsible for their discipline, and who are trained to watch and control their proceedings at all hours and at all occupations. The Bhagulpore Jail has had no escapes since the warder system was introduced there in 1873; Burdwan and Shahabad only one, and Baraset and Purneah only two.

A simple system of classification of prisoners suited to the character of the jail buildings of Bengal, and providing for what is really essential—the segregation of

Discipline.

habitual or vicious criminals from prisoners convicted of a first offence—was introduced in the beginning of 1878. Any more complex system, such as has been proposed by the Prison Conference, cannot, as Bengal jails are at present constituted and constructed, be carried out with efficiency.

The number of offences against jail discipline committed by prisoners was 30,258, or 176·2 per cent. of average strength, against 25,616, or 129·1 per cent. in 1876. There were, however, only 21,213 punishments. Of the offences committed, 2,889 had reference to smoking, or the possession of forbidden articles, 19,704 related to insufficient task-work, and 7,408 were miscellaneous breaches of jail rules. The punishments inflicted were—solitary confinement 1,431, reduced diet 4,421, solitary confinement with reduced diet 2,433, corporal punishment 3,014, and other punishments 10,145. Strict discipline and firm management necessarily result in the discovery of a large number of petty offences. The number of punishments reported in some of the jails, notably in Chumparun (34·86), Lohardugga (33·05), Julpigoree (29·90), Buxar (26·83), Pubna (29·16), Cuttack (26·70), Baraset (22·86), Kungpore (22·04), Mozufferpore (6·47), was obviously far below the number of offences actually committed. Of the 19 jails from which escapes took place during the year, eight showed less than 50 per cent. of punishments on the average strength. The effective prisoners in Cuttack, Mozufferpore, Pubna, Julpigoree, Lohardugga, and Chumparun, all jails in which there were few punishments, earned only Rs. 7-9, Rs. 5-6, Rs. 5-2, Rs. 4-1, Rs. 3-9, and Rs. 2-1 each respectively during the year. There were only 257 criminal offences during the year, against 669 in 1876.

Though the gross expenditure of the year was somewhat less than in the two previous years, the average expenditure on each prisoner was considerably higher. The following table exhibits the expenditure during the past five years:—

	1873.			1874.			1875.			1877.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Gross expenditure	10,39,214	0	0	11,97,177	0	0	11,00,667	0	0	11,16,740	0	0
Average cost of maintaining each prisoner	...	...	...	...	...	...	51	7	...	51	2	11

The average cost was therefore higher even than during the scarcity of 1874.

The charges for diet are shown as Rs. 28-7, against Rs. 26·6 in 1875 and Rs. 26-1 in 1876. The prices of rice, attah, and dāl were considerably higher during the year than in 1876. An examination, however, of the diet charges for the different districts shows that there was ample room for the exercise of economy in this class of charges in several jails. The diet charge in Burdwan was Rs. 31-1, against Rs. 26-5 in the previous year; while in the adjoining districts of Bankoora and Beerbhoom the charge decreased from Rs. 24-9 to

Rs. 23-13, and from 25-12 to 24-10 respectively. Charges for diet should, *cæteris paribus*, be lower in a large than in a small jail; yet in Baraset, with an average of 187 prisoners, the charge was Rs. 23-5, while in the Presidency Jail, 12 miles off, with an average of 977, it was Rs. 27-11. In Jessore the cost of feeding each prisoner has for three years been more than Rs. 31: in Nuddea it has ranged from Rs. 22 to Rs. 25.

In Beerbhoom Jail, of which the capacity is 299, the gross cost of guards and establishment was Rs. 6,708; in Bhagulpore District Jail, of which the capacity is 281, the cost was only Rs. 4,442. It cost Rs. 6,000 to guard and provide establishment for Monghyr Jail, which can hold 354 convicts; in Burdwan, which can accommodate 344, the aggregate charge was Rs. 7,100, and in Chumparun, of which the capacity is only 160, Rs. 7,200. Dacca Jail is constructed to hold 599 prisoners, yet the cost of establishment and guards was only Rs. 7,390: in Furreedpore, which can only hold 371, it was Rs. 8,038. Mozufferpore and Rungpore have both temporary jails in addition to the permanent structures. The capacity of the jails is 469 and 524 respectively, but the charges were Rs. 11,924, against Rs. 7,865 only. As the warder system is more generally introduced, inequalities such as those noticed in Beerbhoom and Bhagulpore will disappear.

The charges for clothing were very high in Patna, Sarun, Chumparun, Durbhunga, Maldah, Pubna, Lohardugga, and Singbhoom. The jails which headed the list in the past year have for some years shown a heavy expenditure on account of clothing. The average of the past four years gives Rs. 5-1 in Pubna and Rs. 3-15 in Maldah, against Rs. 2-4 in Bankoora; Patna spent Rs. 4-2, Sarun Rs. 4-1, and Chumparun Rs. 4-5, against Rs. 2-12 in Gya, and the charges were Rs. 5-5 in Lohardugga and only Rs. 2-4 in Manbhoom. The total charge for each prisoner in the Presidency Jail was Rs. 332-8, and in the Hazareebagh Penitentiary Rs. 466-2. The difference is specially remarkable under clothing and contingencies. The charges under these heads were more than three times as high in Hazareebagh as in the Presidency Jail.

The results of the year's manufacturing operations showed a considerable improvement on those of former years, and the average earnings of each prisoner were Rs. 17-5, against Rs. 10-5, in 1876. Still as many as 27 jails made less than Rs. 10, and 17 made less than Rs. 5 by the labour of each effective convict. Monghyr showed a loss of Rs. 2-11 per prisoner; Durbhunga and Patna earned less than Rs. 2; Bankoora and Chumparun less than Rs. 3; Hazareebagh, Midnapore, Gya, Mymensingh, Nuddea, Lohardugga, and Sarun less than Rs. 4; and Backergunge, Jalpigoree, Singbhoom, Bhagulpore district, and Manbhoom less than Rs. 5 per prisoner. The outturn of manufactures at a jail so favourably circumstanced as Patna was not satisfactory; but with the introduction of oil as the staple industry an improvement is expected. While Mymensingh and Bankoora did not make more than Rs. 3-5 and Rs. 2-4, Tipperah and Dacca, adjoining the first, made Rs. 18-6 and Rs. 18-2, and Burdwan and Beerbhoom, adjoining the second, had a profit of Rs. 20-9 and Rs. 11 respectively. In the Alipore, Hooghly,

Presidency, Russa, Rungpore, Darjeeling, and Burdwan jails the outturn was very satisfactory. The value of manufactured goods in stock rose from Rs. 1,47,077 in 1876 to Rs. 1,77,499. This increase of value of stock occurred entirely in the Alipore Jail. The amount in stock in the Hooghly, Dinagepore, Rajshahye, Dacca, and Purneah jails was considerably diminished during the year. In all these jails, however, except the last there was at the close of the year still a large quantity of goods on hand. Midnapore, Nuddea, and Bhagulpore Central showed a decided increase. The amount of outstanding bills was Rs. 82,614. This includes Rs. 64,800, the value of opium chest covers supplied to the Opium Department from the Alipore Jail. The outstandings were high in the Midnapore, Presidency, Dinagepore, Rajshahye, and Patna Jails.

The gross profit of the year was Rs. 2,71,700, against Rs. 1,93,000 in 1876. Of this Alipore contributed no less than Rs. 1,43,900. The manufactory department of this jail was admirably managed during the year. It was found that the dual system of gunny-weaving and printing at the Alipore Jail necessarily resulted in some want of efficiency in both industries, while the Presidency Jail was without a special industry on which the strength of its establishment could be concentrated. It was accordingly decided to discontinue the miscellaneous manufactures carried on in the Presidency Jail, and to concentrate in it almost all the printing business of the Bengal Government. It was thus found possible to take away the greater part of the printing apparatus from the Secretariat, and to give employment to between 600 and 700 prisoners in the various branches of printing and book-binding. The results have been most satisfactory, and the discipline and industrial power of both jails have greatly benefited by the change. The manufacturing profits of Bengal jails of the year were earned by 9,109 effectives; the average number of effectives employed on jail manufactures in 1876 was 9,971. An examination of the labour statement showed that the number employed on manufactures was much smaller than it might be. A great deal of strength appeared to be wasted in some jails in providing prison officers and servants. Mozufferpore employed 9.38, Buxar 9.29, Baraset 8.73, Furrerdpore 8.29, and Lohardugga 8.06 per cent. of the effectives as prison officers; while in Cuttack, Durbhunga, Monghyr, and Sarun 1.76, 1.41, 1.39, and 1.07 per cent. respectively sufficed. Singbhoom, Bhagulpore Central, Julpigoree, Mozufferpore, and Monghyr employed more than one-fourth of the effectives as prison servants. In Singbhoom the number thus engaged actually exceeded the number occupied on manufactures. Many irregularities of this nature have grown up and been allowed to flourish owing to the neglect of inspection duty of late years. The subject of the profitable employment of prisoners received much attention during the year, and a considerable improvement in the outturn of jail manufactures is expected in future. Petty manufactures are being abolished, and each jail will have one or two suitable industries on which the attention of the establishment can be concentrated. The machinery for the woollen manufactory at Bhagulpore will soon be received, and the buildings are being pushed forward. The Government of India have recently sanctioned the establishment of a cotton manufactory at

Buxar for the provision of convict clothing, and there appears to be a prospect that *coir manufacture* in the Midnapore Jail will develop into a very important industry. *Oil-pressing* will soon be introduced on a large scale into the Rajshahye Central Jail, and a proposal to adopt paper manufacture as the staple industry of Hazareebagh is under consideration.

The daily average number of prisoners in lock-ups was 357, against 395 in 1876. The number of escapes from lock-ups was 53, against 58 in the previous year. Of these 44 took place from the inside of the lock-ups, including 16 from masonry buildings. Eight lock-ups, of which two were guarded by warders, had three escapes or more. The average cost of guarding and maintaining each prisoner was Rs. 116-15, against Rs. 102-13 in 1876. The average cost of diet was Rs. 34-10, against Rs. 28-1 in jails. It is of course to be expected that where small bodies of men have to be fed the average charge will be higher than where large numbers are provided for. No less than 26 lock-ups, however, spent Rs. 40 or more in feeding each prisoner, while six spent Rs. 50 and upwards. Dum-Dum spent twice as much as Alipore and more than twice as much as Baraset, and Ranaghat spent twice as much as Nuddea. As regards the return of manufacturing work done in lock-ups, six lock-ups (Nya Doomka, Bagirhat, Serajungo, Behar, Moonsheegunge, and Attia) earned more than Rs. 50; eight (Busseerhaut, Beegoo Serai, Perozopore, Pachamba, Patooakhally, Gopalgunge, Fenny, and Serampore) worked at a loss; and eleven (Mohesrekha, Busseerhaut, Dum-Dum, Buxa, Bhola, Dinapore, Tajpore, Hajeeopore, Soopool, Jamatura, and Pakour) did no work at all.

The health of the prisoners during the year was not so good as in 1876. The ratio of admissions to hospital per cent. of average strength was 135-43, against 128-56, and that of the daily average number of sick was 4-03, against 3-94. Sickness, though more general, was, however, less fatal. The death-rate, exclusive of cholera cases, was 4-23, against 4-65, and the mortality from cholera was -83, against 1-28. The diseases which caused the greatest number of deaths were dysentery and diarrhoea (33-6), cholera (16-3), chest diseases (9-4), anæmia (8-8), and phthisis and serofula (8 per cent. of the total number of deaths). The jails which, judged by the percentage of admissions to hospital, proved the most unhealthy were the Presidency, European (540), Russa (272), Alipore (266), Pubna (255), Furmedpore (244), Maldah (227), Julpigoree (220), Gya (208), Darjeeling (204), and Baraset (190 per cent. of average strength). A large proportion of the European prisoners received in the Presidency Jail had to be sent to hospital on admission, as they were suffering from the effects of drunkenness and debauchery. There was, however, only one death in that jail during the year. If cholera cases are excluded, the following ten jails show the highest mortality:—Julpigoree (17-5), Backergunge (12-9), Singbhoom (11-57), Chumparun (11), Baraset (10-88), Bogra (10-31), Purneah (8-7), Rungpore (6-9), Dinapore (6-87), Hazareebagh (6-83). With the exceptions of Purneah and Dinapore, these jails all appeared in the list of the ten most unhealthy jail in 1876. The heavy death-rate at Julpigoree is

attributed to the effects of the chilly wind which blows down the Teesta, on the banks of which the temporary huts were erected, and it will be necessary to erect the new jail on a site protected from these winds. The physique of the lower classes in this district, however, is so poor that a considerable mortality must always be expected. In Rungpore there was a satisfactory decline in the death-rate, from 17.9 to 6.9. This resulted partly from the jail being no longer overcrowded, and partly from the successful use of a special milk diet with alcohol. The completion of the drainage works now in progress will probably result in a still further decrease in the mortality. The unhealthiness of the Bogra and Dinagepore jails corresponded with the general condition of the public health in those districts during the past year. Six of the fifteen prisoners who died in Bogra were received in bad health. Besides Chumparun and Backergunge, the jails which were most overcrowded during the year were Alipore, Presidency, and Patna. The Alipore Jail has already been to some extent relieved by the transfer of the printing press to the Presidency Jail, and the opening of the Dacca Central Jail will effect a still further improvement. The strain on the accommodation in the Presidency Jail was met by special arrangements for the transfer of short term prisoners to Hooghly, where there was ample room. The overcrowding in Patna will be relieved by transfers to Buxar. The healthiest jails were Cuttack (4), Bankoora (7), Buxar (8), Lohardugga (1), and Pooree (1.2). The death-rate in these jails in 1876 was 4.9, 3.1, 3.3, 10, and 8.6 respectively. It may reasonably be hoped that, with the construction of the new jails to be taken in hand during the current year, the mortality in the jails of Bengal will be generally reduced.

The statistics of the past thirty-three years indicate a marked decrease in the prevalence of cholera during the past eleven years without any diminution in its virulence. The ratio per cent. of cases to the average number of prisoners was 3.60 between 1845 and 1855, 4.78 between 1856 and 1866, and 1.82 between 1867 and 1877. The ratio of deaths to cases during the three periods was 40.68, 40.53, and 41.41. The statistics of the past ten years show a decidedly greater prevalence of the disease in the jails of Behar than in those of Bengal, the ratio of admissions to the average number of prisoners being 3.12, against 1.49, and that of deaths 1.24, against .63. Of the 48 jails in the province, 29 were visited by cholera during the past year, and 25 had deaths. There was no cholera in the Orissa or Chota Nagpore jails, except one mild case in Lohardugga. Of thirteen jails which had more than ten cases, six were situated in Behar. There was some mortality from cholera in each of the eleven jails of Behar proper. The ratio per cent. of deaths to cases was 76.4 in Chumparun, 70.5 in Rajshahye, 62.5 in Patna, 46.2 in the Bhagulpore Central Jail, and 46.1 in Mozufferpore.

Civil Justice.

THE usual statistical tables and returns will be found in the appendix.

The total number of suits for disposal on the Original Side of the High Court, Original Jurisdiction. High Court during 1877 was 1,412, against 1,414 in 1875 and 2,001 in 1876. The number disposed of during 1877 was 601, against 619 in 1875 and 1,136 in 1876; so that the proportion of work disposed of to the total amount of work before the Court was 42 per cent. in 1877, against 43 in 1875 and 56 in 1876.

There were 251 days on which sittings were held, and the number of appeals and applications disposed of was 8,465, against 6,815 and 7,304 in 1875 and 1876 respectively; the number left pending at the close of 1877 was 3,385, against 4,505 at the end of 1876 and 4,326 at the end of 1875. The portion of work undisposed of in 1877 was therefore 28 per cent. of the whole work on this side of the Court, against 38 per cent. in each of the years 1875 and 1876. The appellate business disposed of consisted of 294 regular and 3,731 special appeals, 1,139 criminal cases, and 2,731 orders on applications in and out of Court. These regular and special appeals and criminal cases taken together amounted to 5,164, against 4,295 in 1876, showing an increase of 869 cases. The number of regular and special appeals left pending in 1877 was 2,848, against 3,876 in 1876—a decrease of 1,028 cases.

The number of suits laid in 1877-78 was 33,510, against 32,640 in 1876-77, being an increase of 870; and the Calcutta Court of Small Causes, amount in litigation was Rs. 17,11,118—a considerably larger sum than in any of the previous ten years.

In the past year a marked change appears to have taken place in the value of the cases brought before the Court. The number of cases below Rs. 10 was less than in any of the previous five years 1872-77; the number between Rs. 10 and Rs. 20 was less than in any of the previous five years, except the year 1876-77; the number between Rs. 20 and Rs. 50 was less than in any of the three years 1872-75; while the number of cases between Rs. 50 and Rs. 1,000 was larger than in any previous year. The number of suits between Rs. 50 and Rs. 1,000 in value in each of the past five years is shown in the following table:—

	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.
Cases between Rs. 50 and Rs. 100	2,703	2,693	2,577	2,401	2,840
" 100 and " 500	2,789	2,718	2,671	2,600	2,913
" 500 and 1,000	507	509	502	475	627
" 1,000 and 1,000	5,099	5,920	5,750	5,566	6,380

The increase in the number of suits, as compared with those of the previous year, was attributed by the Judges entirely to the great impulse given to trade by the Madras famine. This is, no doubt, also the correct explanation of the number of suits of high value as compared with the number in any year since the establishment of the Court. Although the total number of suits was less than in many previous years, the amount in litigation was higher than in any other year since the famine of 1866. During the latter half of the year 1877 the Court was inundated with suits on rice and wheat contracts, suits in trover in respect of gunny-bags, and suits for the hire and demurrage of cargo-boats. There were also many suits against the East Indian Railway Company for short delivery of goods, and the sudden collapse of trade in October gave rise to numerous suits for damages for failure to ship goods.

The total number of suits for disposal was 34,724, of which 33,234 were disposed of, leaving 1,490 pending at the close of the year. Of the total of cases disposed of, 14,340 were decided in favour of plaintiffs, 1,502 in favour of defendants, 3,134 were struck off, in 2,248 cases the plaintiffs were non-suited, and 12,010 cases were compromised. Of the cases left pending at the end of 1877-78, 1,044 were instituted before, but were not returnable till after, the close of the year, 137 were postponed after partial hearing by order of the court, 87 at the request of the persons interested, 101 were referred to arbitration, and 121 were held over pending the service of summons or appearance of witnesses.

There were in all 8,865 applications for after-judgment processes, of which 3,297 were against property and 5,568 against the person, and of these the numbers executed were 2,611 and 2,452 respectively.

The total receipts of the year from all sources of income amounted to Rs. 2,21,218, against Rs. 1,91,880 in 1876-77. The total expenditure was Rs. 1,53,859, leaving to the credit of the Court Rs. 67,359, which is higher than it has been at any period during the past seven years, even making allowance for the rent formerly paid for the Court premises.

The following table shows the totals of the various kinds of original civil suits instituted in the Courts of the interior during 1877 :—

Instituted in—	Suits for money.	Under rent law.	Other suits.	Total.
Small Cause Courts	49,443			49,443
Moonsifs' „	133,175	126,049	35,958	295,182
Sub. Judges' „	2,171	335	1,796	4,602
District Judges' „		27	42	101
Revenue „		7,587		7,587
	184,821	134,298	37,796	356,915

The total number of cases under trial, as well as the number disposed of by the various classes of Courts, is shown below:—

Class of Courts.	Total of suits for disposal.	Total disposed of.
Small Cause Courts	52,263	49,874
Moonsifs'	354,632	300,506
Sub-Judges'	6,647	4,866
District Judges'	283	196
Revenue	11,746	7,070
	425,571	362,512

The following table shows the number of original suits instituted, disposed of, and pending in the Civil Courts for the past three years. It includes Small Cause Court cases, but does not include cases in the Revenue Courts:—

	1875.	1876.	1877.	INCREASE OR DECREASE AS COMPARED WITH	
				1875.	1876.
Instituted	323,166	339,066	349,323	25,862 (increase.)	10,262 (increase.)
Disposed of	320,888	346,000	355,442	34,554 (ditto)	9,442 (ditto.)
Pending	43,493	40,416	39,275	4,218 (decrease)	1,141 (decrease.)

Between 1873 and 1874 there was a falling off in the business of the Courts; but, as observed in the Administration Report of 1876-77, there has been a steady increase through the succeeding years. The number of suits disposed of in 1877 was 355,442, an increase of 9,442 over 1876 and of 34,554 over 1875.

The following statement shows the percentage of suits of each class to the total amount of litigation in each year during the last three years:—

Character of suits.	Total of 1875.	Total of 1876.	Total of 1877.	PERCENTAGES.		
				1875.	1876.	1877.
Suits for money, &c.	125,075	130,070	135,378	44.927	44.875	45.143
Rent suits	116,585	123,507	126,711	41.878	42.610	42.253
Suits for immovable property	28,423	27,919	23,117	10.212	9.632	9.375
Suits for specific performance of contract	1,034	1,138	1,148	.371	.392	.382
Suits to declare and establish rights to real property	32,14	3,663	4,875	1.155	1.263	1.625
Suits to declare and establish personal rights	1,348	1,362	1,415	.484	.469	.471
Suits for account	769	595	662	.276	.205	.220
Suits relating to religious endowments	58	68	63	.020	.023	.021
Suits to set aside judgments	730	543	504	.262	.152	.168
Suits for dissolution of marriage	62	48	44	.022	.016	.014
Suits for enforcement of matrimonial rights	410	330	343	.147	.113	.114
Suits for partition	569	523	525	.203	.180	.176
Suits relative to shipping		1	4			
Suits relating to religion and caste	109	81	93	.038	.027	.031
Total	278,391	280,843	290,885			

The following statement gives the suits disposed of for the last four years classified according to their value :—

		1874.	1875.	1876.	1877.
Not exceeding Rs.	5	29,600	33,825	33,267	34,551
	20	85,518	95,376	102,751	106,244
	100	131,825	145,269	157,605	163,807
	500	35,935	38,253	42,116	41,804
	1,000	4,064	4,516	4,732	4,815
	5,000	3,026	2,996	3,003	3,429
	10,000	421	408	533	420
	100,000	285	245	337	316
Exceeding	100,000	20	12	39	26
Total		290,694	320,900	344,383	355,412

The number of suits decided during the past four years in which the value exceeded Rs. 1,000 was as follows :—

1874	...	...	...	3,752
1875	...	...	...	3,661
1876	...	...	...	3,912
1877	...	...	...	4,191

Execution of decrees.

The following statement shows the results of decrees put in execution during the past three years :—

Year.	Decrees executed.		Amount realized. Rs.
	Completely.	Partially.	
1875 ...	60,291	140,887	1,19,87,061
1876 ...	65,388	158,380	1,11,12,759
1877 ...	66,959	153,392	1,26,86,768

Mofussil Small Cause Courts.

The business of the Mofussil Small Cause Courts during the last three years is shown in the following statement :—

Cases.	1875.	1876.	1877.	Increase or decrease over 1876.
Instituted ..	45,852	47,423	49,143	+ 2,720
Disposed of	45,000	47,652	49,374	+ 2,222
Pending	2,533	2,552	2,385	- 167

Not only was the number of suits instituted, as well as of suits disposed of, in 1877 larger than in 1876, but the cases pending at the close of the last year were 167 less than those left over from the previous year.

The business of the Appellate Courts for the last three years is shown in the statement below :—

				Total number of appeals for decision.			Total number of appeals disposed of.		
COURTS OF APPEAL.				1875.	1876.	1877.	1875.	1876.	1877.
Subordinate Judges' Courts	...	...	...	16,729	15,522	15,299	11,869	11,638	10,848
Collector's Courts	...	...	...	468	591	531	371	520	443
District Judges	{	Civil	...	...	...	15,788	4,264	4,980	4,365
		Revenue	...	...	...	12,495	4,544	4,378	4,140
		From original jurisdiction		68	41	45	57	34	23
High Court	{	Regular appeals from District Courts	...	693	795	821	255	306	284
		Special appeals	...	5,415	6,001	5,778	2,241	2,700	3,586
Total				52,160	51,208	50,757	23,601	24,556	23,989

Classified according as they refer to movable or immovable property, and according as their registration is compulsory or optional, the number of documents registered in each of the past two years was as follows:—

<i>Compulsory.</i>		1876-77.	1877-78.
Registrations affecting immovable property.	(Instruments of sale, &c., of immovable property of value Rs. 100 and upwards)	31,330	35,737
	Instruments of mortgage of immovable property of value Rs. 100 and upwards	34,647	37,589
	Perpetual leases	102,747	108,678
	Other leases under section 17	95,616	125,211
	Other compulsory registrations	3,785	4,807
	Total compulsory registrations affecting immovable property	268,125	312,022
	<i>Optional.</i>		
	Instruments of sale, &c., of immovable property of value less than Rs. 100	67,765	77,181
	Instruments of mortgage of immovable property of value less than Rs. 100	20,604	36,645
	Leases for one year and less	2,140	2,926
Registrations other than those affecting immovable property.	Miscellaneous documents	4,927	5,090
	Total optional registrations affecting immovable property	104,436	121,842
	Total registrations affecting immovable property	372,561	433,864
	(Obligations for payment of money)	69,017	89,818
	All other registrations	22,234	24,598
	Total of above	91,281	114,416
	Number of wills registered	1,681	1,951
	Number of written authorities	51	35
	Total Registrations	465,574	550,269

It appears from this table that there was an increase of 16·4 per cent. in registrations affecting immovable property, and of 25·3 per cent. in the registration of documents not relating to immovable property. In compulsory registration the increase was 16·3, and in optional registration 20·6. The total increase, compared with 1876-77, was 84,695, or 18·1 per cent. The only deeds of which the number registered fell short of the number in the previous year are authorities to adopt; and in these there was a falling off of 16. Every other class of deed contributed to the general increase in registration. The increase was most noticeable in the returns of the districts of Jessore, Chumbarun, 24-Pergunnahs, Nuddea, Backergunge, Mymensingh, Burdwan, Midnapore, Howrah, and Monghyr; while the only districts that

showed any decrease as compared with the previous year were Bhagulpore, Maldah, Purneah, Rungpore, Hazaribagh, Singhbhum, and Darjeeling. The total decrease in the last named seven districts was 1,735, while the total increase in the remaining districts was 86,430. The different provinces under this Government contributed to the total operations of the department in the following proportions:—Bengal proper, 76·4; Behar, 19·7; Chota Nagpore, 2; and Orissa, 1·9 per cent. The percentage of Behar in 1876-77 was 17·8, and the increase in the past year was mainly due to the great increase in the number of agricultural leases registered in Chumparun. The total registrations in this district were 27,299, or 126·4 per cent. above those of the previous year. Each of the other districts of Behar, except Bhagulpore, Purneah, and Maldah, showed an increase in the number of registrations, and the returns seem to show that registration in the hitherto backward province of Behar has at last received a considerable impetus. In Shahabad and Durbhunga the registrations advanced more than 31 per cent., in Sarun the advance was 28·2, and in Monghyr and Mozufferpore more than 26 per cent., while in the Sonthal Pergunnahs it was 38·8 per cent.

The great falling off in the number of perpetual leases in 1876-77, as compared with the number in the previous year, was noticed in last year's Administration Report. In the past year there was an increase of 5,931, or 5·7 per cent., in the number of perpetual leases registered, though the total was still slightly below that of 1875-76. From the tabular statements given in the appendix to the Report it seems to be now clearly established that while the registration of perpetual leases is spreading in Central and Western Bengal, it is steadily decreasing in the Eastern Districts. This result was to be expected, for the custom of registering perpetual leases has hitherto prevailed within extremely narrow local limits, and it is obvious that the execution and registration of perpetual leases must decrease when most of the land which it is convenient to alienate in perpetuity has been so alienated. In 1875-76 the three districts of Backergunge, Chittagong, and Noakholly supplied 50,562 perpetual leases out of 109,399 registered; in 1876-77 they gave 37,318 out of 102,747; and in 1877-78 the number fell to 31,952 out of 108,678. In Dacca the number has been steadily falling, having been 1,504, 1,413, and 922 respectively during the three years 1875-78; while in Tipperah the numbers for the same three years were 1,878, 1,704, and 1,296. In fact in every district of the Dacca and Chittagong Divisions except Furreedpore the falling off for the last three years in the number of perpetual leases has been continuous and considerable. The increase in the number of registrations of perpetual leases elsewhere than in the Eastern Districts is very marked, and is especially noticeable in the returns of the Burdwan and Presidency Divisions. There was an increase in each district of the former Division and in each district of the latter Division except Moorshedabad. Jessore has been steadily progressing with 24,735, 28,012, and 32,272 registrations of perpetual leases during the past three years; while for the 24 Pergunnahs the numbers were 3,541, 4,278, and 5,958, and for Nuddea 2,492, 2,982,

and 4,400. The increase in Jessore is attributed to the extension of cultivation and to the unwillingness of the ryot to reclaim marshy tracts without first obtaining a lease in perpetuity securing to him a reward for his labour and expense; and there can be little doubt that the general increase in the number of perpetual leases in Central and Western Bengal is due to the struggle of the ryots for a more permanent interest in the soil they cultivate.

The number of term-leases registered rose from 95,616 in 1876-77 to 125,211 in the past year, the increase being almost entirely in the number of leases not exceeding Rs. 50 in value. There was a rise of 26,944 in the registrations of leases not exceeding Rs. 25 in value, and of 2,160 in those between Rs. 25 and Rs. 50. More than half the total increase in the number of registrations of term-leases was due to the Chumparun district, where the registrations were 24,767, against 8,410 in the previous year. Of the 85,183 leases not exceeding Rs. 25 in value, 23,087, or more than one-fourth of the whole, were registered in Chumparun. The great rise in the number of registrations of term-leases in this district was noticed in last year's Administration Report, and appears to be solely due to the registration of a large number of indigo leases, in consequence of the ryots who held unregistered deeds refusing to sow indigo. Next to Chumparun, Mymensingh showed the largest number of registrations of term-leases, there having been 11,571 such registrations in 1877-78, against 8,877 in the previous year. The fluctuations in the other districts were slight.

In 27 out of 42 districts there was an increase in the optional registrations of bonds, and no district showed any serious falling off. The total number of bonds registered was 89,818, against 69,047 in 1876-77. More than one-half of the bonds registered, and far more than half the year's increase, were, however, due to the district of Jessore, where 49,176 obligations for the payment of money were registered, against 35,694 in the previous year. The number of bonds registered in the 42 districts of Bengal during the last five years was 311,029, and of these 144,888 were registered in Jessore; in the past two years out of 158,865 bonds 84,870 were registered in the latter district.

In the minor operations of the department there was a general increase. The number of wills registered was 273 in excess of the number in the previous year, and there were 16,575 applications for search and copies of documents, against 13,362 applications in 1876-77. These searches are usually made by intending purchasers or lessees who wish to ascertain if there are any incumbrances on the land for which they are negotiating, and the increase in the number of these applications is one of the best proofs of the growing usefulness of the department. The number of registered documents discredited and rejected by Civil Courts during the past year was 25, or 12 more than in 1876-77. The prosecutions instituted during the year were 67, against 38 in 1876-77, and the result of the prosecutions was very satisfactory. In the 67 cases 63 persons were convicted, 41 being punished with imprisonment and 22 with fine.

1877-78.]

The financial position of the department was *more prosperous* than at any previous time. The following statement shows the actual cash receipts and expenditure of the past five years:—

	Receipts.	Expenditure.	Surplus.
	Rs.	Rs.	Rs.
1873-74 ...	4,82,509	3,29,431	1,53,078
1874-75 ...	5,52,325	3,86,953	1,65,372
1875-76 ...	5,56,505	4,17,402	1,39,103
1876-77 ...	5,66,882	4,30,168	1,36,714
1877-78 ...	6,64,236	4,57,355	2,06,881

To the cash expenditure of Rs. 4,57,355 there should, however, be added all public works charges, and the cost of stationery supplied to registration offices by the Superintendent of Stationery, the cost of printing paper, and of printing and binding done for the department. The public works charges amounted to Rs. 32,204. The stationery and printing charges, including the printing of the annual report, were Rs. 44,426; so that the gross expenditure of the year was Rs. 5,33,985, leaving a net surplus of Rs. 1,30,251 as compared with Rs. 78,974 in 1876-77. The increase in the receipts of the year is due partly to more numerous registrations and partly to the enhanced table of *ad valorem* fees. The increase in expenditure is under the heads "percentage paid to registering officers," "temporary establishments," and "paper and printing." In all there were 309 offices open at the close, against 310 at the beginning of the year.

The scheme for the use of printed forms of agricultural leases, and their counterparts, and of bonds for small amounts, was abandoned during the year. This experiment was first made in 1874-75 in nine selected districts, and was extended in 1876 to the whole of Lower Bengal. It has been found, however, impossible to introduce any one form of document, whether lease, counterpart or bond, equally suitable to the circumstances of all districts and generally acceptable to the people. In five out of the nine districts in which the forms were first introduced not a single bond-form was either sold or registered in the year 1876-77, and in the large and important districts of Dacca and the 24 Pargunnahs only five bonds in the printed form were presented for registration. Even in those districts where, after the attention of officers had been specially called to the subject, considerable sales were effected, the returns showed that a very small proportion of the forms sold were presented for registration. Any further expenditure on the general experiment did not therefore appear justifiable, but Collectors have been authorized to indent specially for any particular forms for which there is likely to be a demand in their districts.

The Muhammadan Marriage Registration Act (B.C.) of 1876 has now been in force for nearly three years. By the beginning of the year 1877-78, 77 offices had been opened in 14 districts, and by the end of the year there were 103 offices, though the Act was not extended to any fresh district

Muhammadan Marriage
Registration Act.

during the year. The following statement shows the number of ceremonies registered in the last two years; but the total returns of the years cannot be compared, as the Act was only extended to six districts before the commencement of the year 1876-77:—

	Marriages.	Khula divorces.	Other divorces.	Total ceremonies.	Muhammadan population in the thanas in which the Act is in force.
1876-77	2,555	161	409	3,118	6,000,850
1877-78	7,381	595	1,404	9,380	10,326,575

The only districts in which the Act appears to be at all popular are Chittagong and Rungpore. In these districts, with fourteen and fifteen offices, respectively, there were registered during the past year 2,973 and 2,206 ceremonies, or more than half the total for the 14 districts in which the Act was in force. In Backergunge only 211 ceremonies were registered among a Muhammadan population of 1,255,427, and in Furreedpore and Jessore only 105 and 46 ceremonies among populations of 863,053 and 312,974 respectively.

The Registrar of Calcutta is *ex-officio* Registrar of Joint Stock Companies. The total number of companies in existence on the 31st December 1877 was 154, representing a capital of Rs. 7,55,46,500. During 1877 there were registered 14 companies with an aggregate nominal capital of Rs. 39,52,000, against 19 companies having an aggregate nominal capital of Rs. 31,67,000 registered in 1876. The 14 companies registered in the past year consisted of six tea companies, one brewery company, one company for working cotton mills, one opera company, two jute companies, and three mercantile companies. More than half the number of existing companies are tea companies. Five companies increased their capital during 1877; against six in the previous year. The total increase of capital was Rs. 3,42,500. Three companies with an aggregate capital of Rs. 27,50,000 were wound up during the year, against 7 wound up in 1876. Of the 154 companies existing on the 31st December 1877, 132 had their registered offices situated in Calcutta. Rules regarding the duties to be performed by the Registrar of Joint Stock Companies have been sanctioned by Government since the close of the year.

Indian Companies' Act,
1866.

Municipal Administration.

SOME progress was made in the sanitary improvement of the town during this the first working year of the municipality under the elective system, which came into operation towards the close of October 1876. The drainage in the northern part of the town was extended by 13·03 miles, bringing up the completed drainage to 99·58 miles and leaving 75·77 miles still to be constructed. A contract was entered into with the Oriental Gas Company for the complete illumination of the town with gas, and a provision of ten lakhs of rupees was made for the doubling of the water-supply, the arrangements for which are reported as being about to be completed. Arrangements were also made during the year for the cleansing of private houses by the formation of a new department called the night-soil service. The new system proved expensive, and its introduction was attended with many difficulties.

There were 104 meetings during the year. Of these 5 were quarterly, 4 special, and 6 special general meetings and 89 committee meetings. On the first introduction of the new Act (IV, B.C. of 1876) many separate committees were appointed to look after the working of the various departments of the municipality; but the system was found not to work well, and the special committees were during the year merged into a general committee called the "Town Council," to which questions of all sorts are now referred for consideration and disposal.

The state of the municipal finances is far from satisfactory, owing to errors in the estimates of 1877, both in the receipt and expenditure side, and to the heavy additional expenditure incurred by the executive without the sanction of the Commissioners, especially in connection with the arrangements for the new night-soil service. This however, is a subject which will be fully discussed in next year's report, as it only came under the direct notice of Government after the close of the year under review.

Income of the municipality.

The following statement shows the actual revenue of the municipality for the year 1877, as compared with that of the previous year :-

Items of income.	Income during	
	1876.	1877.
	Rs.	Rs.
House-rate	9,13,742	8,57,724
Water-rate	5,69,796	6,18,136
Lighting-rate	2,85,350	2,30,276
Police-rate	3,61,749	2,29,262
Licenses on trades and professions	2,55,436	2,54,227
Carriage and horse tax	1,11,305	1,13,769
Registration of carts and hackeries	50,542	68,745
Fees, fines, and penalties	36,932	35,095
Contribution from Government on account of police	96,730	99,785
Receipts from the conservancy department	41,483	48,651
Receipts on account of the road department, street watering, new drainage, and municipal railway	8,319	27,875
Receipts of the night-soil department	73,820	1,23,724
Ditto from the slaughter-houses	37,368	39,930
Ditto from the municipal markets	97,186	98,734
Rents and miscellaneous receipts	1,05,623	1,00,533
Total	30,45,381	29,46,466

The revenues of the municipality are mostly derived from direct taxes. The general fund comprises the house-rate, the license tax, the horse and carriage tax, hackery registration fees, trade refuse fees, and other miscellaneous receipts. The rates of the past, as compared with those of the previous year, were as follow :—

	1876.	1877.
House rate	7½ per cent.	7 per cent.
Water-rate	4½ "	4½ "
Police-rate	2½ "	2 "
Lighting-rate	2 "	2 "

During the year the assessments on houses and lands in Wards Nos. 1, 3, 4, and 6 were revised. A number of premises hitherto unassessed, on the ground of their being places of public worship, were for the first time included in the assessor's operations, with the object of fixing the valuation of such premises and not for the purpose of demanding rates in cases where rates had never been paid before. In some cases the claims to exemption proved unfounded, and rates were imposed.

In addition to the general work of revision, the assessments of 4,515 houses in different parts of the town were enhanced during the year, owing to the construction of new or additional buildings. In the case of 718 houses the assessments were reduced owing to partial or entire demolition of houses, removal of tenants, &c. The result of the year's operations was an increase in the assessed annual value of property in the town amounting to Rs. 3,05,121, and a decrease amounting to Rs. 1,14,078, or a net increase of Rs. 1,86,043.

1877-78.]

26,335 licenses were granted during the year. Of these, 152 were issued to Joint Stock Companies; 1,425 to merchants, bankers, &c.; 216 to barristers, attorneys, and pleaders; 141 to mooktears and law agents; 16 to surgeons; 100 to licentiates of medicine, apothecaries, veterinary surgeons, &c.; 22 to owners of markets; 124 to hotel-keepers, manufacturers, &c.; 87 to owners of cargo-boats; and 337 to brokers and dealers in precious stones. The rest were issued to petty dealers, pawn-brokers, money-changers, midwives, &c.

The subjoined statement shows the expenditure of the municipality under the different revenue accounts as compared with the previous year:—

Expenditure.

Items of Expenditure.	Expenditure during 1876. Rs.	Expenditure during 1877. Rs.
Interest on debenture loans	4,20,850	1,88,988
Interest on loans from Government	3,91,178	2,02,508
Contribution towards the liquidation of debenture loans	1,10,000	1,10,000
Repayment of Government loans	1,32,796	95,017
Pay and contingencies of the police	4,26,849	4,33,982
Direction and management	1,05,520	1,14,985
Gowkhana superintending establishment	5,219	6,080
Engineer's department	56,688	60,218
Health Officer's department	16,214	22,821
Collection of rates	45,235	49,789
General expenditure	61,333	59,973
Drivers' wages and feed of cattle	86,822	1,05,773
Conservancy charges	76,807	90,919
Road department	3,20,380	3,42,271
Street watering	26,822	29,349
Lighting charges	2,15,389	2,29,177
Working of the drainage pumping station	40,351	50,685
Working of Municipal Railway	56,939	45,740
Purchase of new locomotives and boilers ... ..	.....	20,481
Health Officer's department, miscellaneous charges	11,710	530
Night-soil department	15,174	1,52,156
Slaughter-house charges	12,812	11,204
Water-supply expenditure	1,79,405	2,02,314
Miscellaneous charges	1,32,511	75,143
Total expenditure	30,10,446	27,06,915

Loans of the municipality.

The loan liabilities of the municipality at the close of the past year stood as follow:—

	Rs.
Debenture loans from the public at 6. per cent.	54,99,600
Drainage loans from Government at $4\frac{1}{2}$ „	24,59,400
Market loans from Government at $4\frac{1}{2}$ „	12,22,395
Office loan from Government at $4\frac{1}{2}$ „	1,30,000
Water-supply loans from Government—	
First loan at 4 per cent.	52,00,000
Second loan at $4\frac{1}{2}$ „	4,11,000
Third loan at $4\frac{1}{2}$ „	1,45,000
Total	1,50,67,395

The total interest the municipality has to pay every year is Rs. 7,34,011, viz. Rs. 3,29,976 on loans from the public, Rs. 2,08,000 on the first water-supply loan of 52 lakhs from Government, and Rs. 1,96,035 for the other loans from Government. Besides these sums the municipality has to pay annually Rs. 3,00,344 towards a sinking fund, viz. Rs. 1,10,000 for loans from the public, Rs. 1,04,000 for the first water-supply loan, and Rs. 86,344 for the other loans from Government.

The question of the consolidation of all the existing Government loans, except the first water-supply loan of 52 lakhs, into one loan bearing interest at $4\frac{1}{2}$ per cent. is under the consideration of the Government of India. It is proposed that the amount of the sinking fund in connection with the loans proposed to be consolidated should be credited in reduction of the consolidated amount, and that arrangements be made for the repayment of the balance within a certain number of years by equal half-yearly instalments. This, if finally sanctioned by the Government of India, would afford some relief to the municipality and improve its financial position.

The drainage of the northern part of the town was considerably extended during the year. The total length of sewers constructed amounted to 68,847 linear feet, or 13.03 miles. The completed drainage measures 99.58 miles, leaving 75.77 miles still to be constructed. The house drainage operations were also satisfactory. 1,852 premises were surveyed and their plans prepared, and 1,392 connections for 1,244 premises were made. The total number of premises connected with the sewers up to the end of the year was 11,590.

The budget grant for the year under this head amounted to Rs. 3,57,500, but the expenditure was Rs. 3,42,271. New layers of stone were put on six streets measuring 596,493 superficial feet. New layers of *khoa* or broken bricks were put on seven streets measuring 199,010 superficial feet, and thorough repairs were done to 60 streets with stone and *khoa*, measuring altogether 654,094 superficial feet, and partial repairs were carried out in every ward of the town. Besides, footpaths in 41 streets were repaired and improved.

Street watering was carried on in all the large thoroughfares and streets; 9,409,441 square feet of road surface was watered. Of this, 3,768,955 square feet were watered with filtered water, and 5,640,486 square feet with unfiltered water. 35.6 per cent. of the total area of road surface still remain unwatered.

The scavenging of the public streets and lanes was regularly performed. 7,163 wagon loads of refuse were removed from the town to the Salt Water Lakes. The drains, public urinals, and latrines, were all well looked after, and the sewers were regularly flushed. 1,306 persons were prosecuted for breach of the conservancy rules, and 655 persons were convicted; Rs. 1,524 were realized as fines.

Dr. Payfe, the Health Officer of the Municipality, continues to bestow much attention on the sanitary improvement of the town. 54 tanks were dewatered, and

38 were filled up with street refuse. The work of filling up ten other tanks was in progress at the close of the year. There are now left 429 open tanks (i.e., tanks which are not enclosed and private), which remain to be filled up. The work will be carried on gradually, as materials happen to be at the disposal of the Commissioners.

The Commissioners did not lose sight of the question of bustee improvement, and although no interior conservancy of bustees was undertaken, except only in a few cases, where the owners could be induced to pay for the work done, many detached improvements were effected in different parts of the town by filling up tanks and foul ditches and laying out new roads. In a bustee at Machooa Bazar Street three new roads were projected, and have since been taken in hand; two new roads were also under construction in the bustees between Machooa Bazar Street and Baranosey Ghose's Street. In the Southern Division of the town two native land-owners have undertaken the improvement of their estates. Improvements have also been commenced in a part of the town known as Anthony Bagan. The Commissioners had further determined upon purchasing Koomedan Bagan Bustee by raising a loan for the purpose; but as it was found that this would not be in accordance with the Municipal Act, and as the finances of the municipality would not admit of a large sum of money being annually set aside for buying up blocks of bustees, they felt that the only alternative left to them was to induce the proprietors to undertake the drainage of their property and the construction of thoroughfares to admit of the passage of carts. This subject will be borne in mind when the amendment of the Municipal Act comes next to be considered.

The most important movement originated during the year for improving the sanitation of the town was that connected with the removal of night-soil from private houses. The establishment of night-men was revised during the year, and a scale of fees was settled by a special committee. The new arrangements are reported to have proved beneficial, though not altogether satisfactory from a financial point of view.

The municipal railway line which was constructed in 1866 for the purpose of removing the refuse of the town to the Salt Water Lakes was worked with efficiency during the year. The line is 12 miles in length, and is also used by the Port Commissioners for running goods trains from the Eastern Bengal Railway to the Strand Bank. A sum of Rs. 12,163 was paid by this latter body for the privilege.

The cultivation of the reclaimed lands in the Salt Water Lakes was entrusted to a contractor, who, being devoid of enterprise, failed to improve the soil, which is said to be admirably suited for the cultivation of tobacco, sugarcane, sarbo, and garden produce of every kind.

The quality of the water supplied to the town, though not equal to that of 1876, was still very good. The amount of organic nitrogenous matter present in the hydrant water was larger during the year than in 1876. This, it is said, was due to the large rainfall of the year. The result of the

analysis conducted by the Water Analyst showed that the water of the pipes contained on an average ammonia representing nitrogenous organic matter to the extent of $\cdot 046$ per million, and chlorine representing dissolved sodium chloride to the extent of $10\cdot 40$ per million. The daily average quantity of water supplied to the town was 6,719,266 gallons, or 178,112 gallons over that of the previous year. Seven hundred and ninety-six premises were connected with the water-supply during the year, of which 788 were for domestic and eight for business purposes. The total number of premises connected up to the end of the year was 10,471.

The total number of gas lamps lighted in the town at the expense of the municipality was 2,794 and the total number of oil lamps 787. The average illuminating power of the gas during the year was $14\cdot 09$ candles.

The number of deaths registered in the town during the year was 13,704, against 12,964 in the previous year. This gave a death-rate of $31\cdot 9$ per thousand of the population, a percentage higher than that of any previous year within the last seven years, except 1875, as shown below:—

1871	...	...	...	...	23·9 per mille.
1872	...	...	...	...	24·1 „
1873	...	...	...	...	24·1 „
1874	...	...	...	...	26·8 „
1875	...	...	...	...	32·7 „
1876	...	...	...	...	30·1 „
1877	...	...	...	...	31·9 „

The following table shows the number of deaths during 1877 classified according to nationality:—

Hindoos	...	...	...	9,200
Mahomedans	...	...	...	3,614
Non-Asiatics	...	...	...	314
Mixed races	...	...	...	504
Other races	...	...	...	72
Total	...	...	...	13,704

Of these 7,965 were males and 5,739 females. So many as 5,151 died from fevers, 1,418 from cholera, 1,683 from bowel-complaints, 67 from small-pox, and 5,385 from other causes.

The following statement gives the total number of births registered during the year:—

Hindoos	...	...	...	4,873
Mahomedans	...	...	...	1,820
Non-Asiatics	...	...	...	230
Mixed races	...	...	...	482
Other races	...	...	...	52
Total	...	...	...	7,457

1877-78.]

Of these 4,011 were males and 3,446 females. The ratio of births per 1,000 of the population was 17.3.

The year 1877-78 was the first year in which the new Bengal Municipalities in the Interior of Bengal. Municipal Act, 1876, came into full operation. Including the Suburban Municipality, the number of municipalities in the interior of Bengal was as follows:—

		1876-77.	1877-78.
First class municipalities ...	...	24	25
Second class ditto ...	...	97	97
Unions ...	...	70	69
Stations ...	...	2	2
Total,		193	193

There was an addition of one to the number of the first class municipalities. The town of Rampore Bauleah, the sudder station of the district of Rajshahye, was raised from the status of a second class to that of a first class municipality. The Union of Mooktagacha, in Mymensingh, was made a second class municipality, and a new union, called the Palkote Union, was formed in the district of Lohardugga, in the Chota Nagpore Division. The withdrawal of the Union of Patuakhally in Backergunge, which was reported last year, took effect during the year under review. The number of Stations remained the same as in last year.

The provisions of Part VII of the new Act (containing special regulations regarding conservancy and other matters not necessarily suited to all towns), or some of them, have been extended to the following municipalities since the passing of the Act and up to the close of the year under review, viz.—

In the Burdwan Division.

Howrah.	Raneegunge.	Hooghly.
Ooterparah.	Bankoora	Sooree.
Midnapore.	Serampore.	

In the Presidency Division.

Suburbs of Calcutta.	Santipore.	Beernugger.
Berhampore.	Nyehatty.	Joynagore.
Kishnaghur.	Ranaghat.	Jessore.

In the Rajshahye and Cooch Behar Division.

Darjeeling.	Sherepore.	Managore.
Bogra.	Natore.	Rungpore.

In the Dacca Division.

Dacca.	Madaripore.	Brahmunberiah.
Burrisal.	Comillah.	

In the Chittagong Division.

Chittagong.	Noakholly.
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In the Patna Division.

Patna.	Mozufferpore.	Sassaram.
Arrah.	Durbhanga.	Doomraon.
Gya.	Buxar.	Chupra.

c. *In the Bhagulpore Division.*

Bhagulpore.
Monghyr.
English Bazar—(Maldah).

Deoghur.
Maldah.

Colgong.
Purneah.

In the Orissa Division.

Cuttack.

| Balasore.

| Kendraparah.

c. *In the Chota Nagpore Division.*

c. Hazareebagh.

| Purulia.

Part IX of the Act, regarding the establishment and regulation of municipal markets, has been extended to the following municipalities:—

Tumlook.
Suburbs of Calcutta.
Dacca.
Arrah.

Gya.
Sasseram.
Monghyr.
Cuttack.

Dajeeing.
Deoghur.
Hazareebagh.

Bye-laws have been framed by the Municipal Commissioners and confirmed by the Lieutenant-Governor for the following municipalities:—

Dacca.
Patna.
Arrah.
Bhagulpore.
Monghyr.
Sahebgunge (station).
English Bazar (Maldah.)

Suburbs of Calcutta.
Maldah.
Berhampore.
Durbhunga.
Comillah.
Deoghur.
Dinapore.

Bauleah.
Kungpore.
Balasore.
Colgong.
Purneah.
Nonkholly.
Kishnaghur

Constitution of committees.

The constitution of the committees of the various municipalities was as follows:—

CLASS OF MUNICIPALITIES.	1877-78.			
	Europeans.	Natives.	Officials.	Non-officials.
First class	178	284	149	313
Second "	311	985	365	931
Unions	11	478	27	460
Stations	14	7	4	17
Total	514	1,753	545	1,721
	2,266		2,266	

Compared with the figures of last year, there was an increase of 113 in the number of Municipal Commissioners. The increase occurred both in the number of European and Native Commissioners, being an addition of 49 to the former and of 64 to the latter. The attendance of Commissioners at the meeting of the Committees was on the whole regular, and many evinced a fair amount of interest in the affairs of their respective municipalities.

The elective system was in operation in the municipalities of Burdwan, Serampore, and Kishnaghur. The number of elected Commissioners in the three municipalities remained the same as in the previous year. There was nothing particular to notice regarding the working of the system in these municipalities during the past year.

Income.

The receipts of the various *municipalities* classed under the several heads were as follow:—

	FIRST CLASS MUNICIPALITIES.		Second class municipalities.	Unions.	Stations.	Total.
	Suburbs of Calcutta and Howrah.	Towns in the interior.				
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Rate upon owners according to the yearly value of houses and lands owned by them	4,00,527	4,15,818	.....	.....	.....	8,16,345
Tax upon occupiers of holdings within the town according to their circumstances and the property to be protected .....	.....	.....	4,42,564	1,09,020	17,001	5,69,185
Tax upon carriages, carts, horses, and elephants ...	52,439	46,173	25,294	1,088	1,151	1,26,145
Fines and fees ...	33,082	19,607	6,580	1,790	506	61,565
Pounds, ferries, and tolls ...	8,026	1,04,236	31,447	24	.....	1,43,783
Rent of houses, gardens, and markets belonging to municipalities ...	1,488	30,260	6,805	3,116	.....	41,669
Other sources, including grants from Provincial Funds... ..	1,56,108	55,810	27,501	7,626	1,991	2,49,036
Total ..	6,51,670	6,71,954	5,40,191	1,23,264	20,649	20,07,723

As compared with the receipts of the previous year, there was an increase under each of the first three heads, which comprise taxation proper. The total increase under these heads, amounted to Rs. 98,619, the figures being Rs. 15,11,675, against Rs. 14,13,056. The total income of all the municipalities exceeded that of the previous year by Rs. 1,18,162. The increase was due partly to the imposition for the first time in many of the municipalities of the tax on carriages and animals, and partly to revision of assessments.

The following table shows the heads under which expenditure was incurred in the municipalities, unions and stations during the year:—

	FIRST CLASS MUNICIPALITIES.		Second class municipalities.	Unions.	Stations.	Total.
	Suburbs of Calcutta and Howrah.	Towns in the interior.				
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Establishments	78,274	65,156	64,178	15,479	9,734	2,26,821
Police	1,04,404	1,63,180	1,91,765	65,808	2,865	5,36,102
Conservancy	1,72,008	1,19,165	54,381	18,123	3,816	3,67,493
Roads	1,24,684	1,56,824	95,451	17,854	5,785	4,00,558
Buildings	38,057	9,38	4,790	1,089	345	54,049
Works of public utility ...	619	17,060	4,000	6,747	.....	28,426
Miscellaneous and contingent charges	1,38,678	1,34,455	87,227	12,036	4,447	3,76,843
Total ...	6,56,724	6,71,603	5,04,172	1,37,096	20,992	10,00,692

The above figures show a total expenditure of Rs. 19,90,592, against Rs. 18,56,443 in the previous year, or an increase of Rs. 1,34,149 in the expenditure of the year under review. The increase was most marked under the head of Conservancy, being Rs. 1,15,002 over the expenditure of 1876-77. There was also an increase of Rs. 11,396 in the expenditure on account of police during the year over that of the past year, the figures being Rs. 5,36,402 in 1877-78, against Rs. 5,25,006 in 1876-77. The expenditure under the head of Establishment also showed an increase of Rs. 15,866. The expenditure on account of roads showed a decrease of Rs. 10,094, the figures being Rs. 4,00,558 in 1877-78, against Rs. 4,10,652 in 1876-77.

Marine.

THE commencement of a new policy in respect of marine affairs was announced in a resolution of the Government of India in July 1877, whereby the whole of the marine establishments afloat and ashore were amalgamated into one imperial service, designated 'Her Majesty's Indian Marine,' and placed under the control of the Supreme Government. All existing establishments of officers and vessels were to be brought on to one list. All marine establishments, dockyards, and vessels on the eastern side of India, were placed under the immediate control of an officer to be styled 'Superintendent of Marine,' who was to advise the local Government in all subjects connected with marine matters, and act as the channel of communication between the local Government and the vessels placed at its disposal by the Government of India. To this post Commander Robinson was appointed by the Government of India in October 1877. The titles of Master Attendant, Harbour Master, &c., were abolished, and in lieu of them officers were appointed under the designation of 'Port Officers' from among officers of the new Indian Marine service created by the above resolution. Pending the completion of detailed arrangements, Lieutenant F. Warden, who was lately in charge of the abolished office of Master-Attendant, was appointed to act as Port Officer. The whole *personnel* of this Indian Marine service was removed from the orders and jurisdiction of the local Government; but the pilot establishments, local lights and light-vessels, conservancy of rivers and ports, shipping duties, &c., were left, as far as practicable, under the local authorities, except as regards the selection of officers for superior appointments in these local services.

In carrying out the details of the reorganization, it was arranged that the cost of the Port Officer and his establishment should be transferred to Provincial Services, an allotment of funds from imperial revenues being made for the purpose, with the proviso that should it hereafter

Port Officer's establishment.

be necessary this Government should not be debarred from applying for an increased grant. The following scale of establishment was recommended by this Government:—

		Rs.	Rs.
1 Port Officer	{ Salary	... 1,200	
	{ House rent	... 200	
		— 1,400 per mensem.	
1 Assistant Port Officer	...	750	
1 Head Clerk and Registrar	...	300, rising to Rs. 400.	
16 Clerks, aggregating	...	880	
10 Peons, ditto	...	66	
1 Duffry on Rs. 9, 1 Yerash on Rs. 6, 1 sweeper on Rs. 5	...	20	
Total		...	3,416, rising to Rs. 3,516.

It is believed that this scale will suffice for all future requirements.

With regard to the Chittagong Port Offices, it was explained to the Government of India that they were not properly port appointments, the port duties being only subsidiary to those of the Customs Department, from which the greater part of the pay is drawn. It did not therefore seem advisable that these posts should be filled by officers of the Indian Marine, or that any change should be made in their existing constitution. The case of the Orissa ports was similar to that of Chittagong; and the Government of India were asked to allow the settlement of the question as regards Orissa to stand over until a year's further experience had been gained of the working of the scheme already in force, under which there is one Port Officer for the ports of Pooree and False Point, and a second for those of Chandbally and Balasore. As regards the Harbour Master's Department in Calcutta, which it was proposed to except from the list of appointments reserved for members of the Marine Service, it was proposed to the Government of India, after consultation with the Port Commissioners, that the appointment of Harbour Master should remain under the control of the Commissioners, and that the salary of the post should not be altered. A similar recommendation was made as regards the Shipping Master's Department in Calcutta, viz. that it should continue to be on its former footing and under the control of the Collector of Customs, who is Shipping Master of Calcutta *ex officio*.

As regards the conduct of the marine business of the local Government, the distribution of vessels, and the adjustment of the expenditure of the Marine Department debitable to provincial revenues, various proposals were made to the Government of India, upon which orders have not yet been received. They will be noticed in next year's report.

On the expiry of the year under report the Pilot Service numbered 68 members, or two below the sanctioned strength : 43 belonged to the covenanted service,

The Pilot Service.

and 25 were licensed pilots. Of the 43 service pilots 33 were actually running, two were in command of pilot-vessels, six were on leave, one was on staff duty, and one under suspension. The 25 licensed pilots were all actually running. Thus 58 pilots, or two more than last year, were available for service on vessels entering and leaving the Hooghly. The actual number of ships piloted during the year (including 29 pilot and light-vessels) amounted to 2,722. According to the estimate of the Committee of 1872, the pilotage of this number of vessels would have required the services of 76 running pilots. The time now occupied in the pilotage of each vessel is, however, owing to the general use of steam, much less than was allowed by the Committee; and partly owing to this fact, and partly to the manner in which the service as a body responded to the extra calls made on it by the unusually heavy work of the past year, caused by the famine in Madras and Bombay, the work of the port was on the whole satisfactorily accomplished, though there were occasional complaints of delays at the Sandheads.

In last year's report a full account was given of the scheme for the reorganization of the Pilot Service, which had received provisional sanction for two years of the Government of India. This scheme came into full operation during the past year, and has so far worked well. A large number of memorials was received by the Government from officers of the service who considered themselves aggrieved by the operation of the new rules, and a few readjustments were made in the graded list of pilots. The experience of the first year's working of the new scheme has shown that the average income of pilots throughout the service has increased. Each branch pilot piloted on an average 6.22 ships a month; for master pilots the monthly average was 4.19 ships, and for Mate Pilots 4.04 ships. The average employment of each member of each grade of the service was therefore considerably higher than during the previous year, and very much above what the Pilot Committee of 1872 held to be sufficient, viz. three ships a month for each pilot.

It was mentioned in last year's report that the scheme proposed by this Government for recruiting the Pilot Service had been accepted by the Secretary of State, and that leadsman apprentices would in future be selected from the training ships in England. Seven of the apprentices thus selected arrived in India during the year under report, and were posted to pilot brigs to learn their profession. Arrangements were made for boarding them in respectable families in Calcutta during the time they were off duty. The Secretary of State's despatch recommended that "a senior member or members of the Pilot Service should be commissioned to receive these young men and keep them under supervision while they are not actually on duty, in such a home, perhaps, as used to be provided some years ago." While fully recognizing the necessity of proper care and supervision being exercised over these young men

Arrangements for recruiting the Pilot Service.

to prevent their falling into evil habits, it was believed by this Government that the object in view would be sufficiently attained by the arrangement indicated above. The experience gained when a home was formerly maintained, at one time afloat and another time ashore, for junior members of the Pilot Service, makes it somewhat doubtful whether the revival of that plan is desirable; and at present the number of leadsmen is too small to justify the outlay that would be required for fitting up a home and providing the necessary superintendence and establishment.

A Committee was appointed during the year to draw up a new set of leave rules for the Pilot Service. The existing rules were found to be too liberal as regards the periods of leave, and not liberal enough as regards leave allowances. A pilot could hardly take furlough home under them except under medical certificate, in which case he got passage-money. The new rules drafted by the Committee put pilots on very much the same footing as other uncovenanted officers, except in regard to privilege leave, as to which the rules are somewhat more favorable, in consideration of the trying nature of the duties of the service. It was proposed that officers already in the service should be allowed the option of electing the new rules or of continuing under the rules hitherto in force.

A question was raised regarding the rates at which pilots should subscribe for the pensions of their wives and families, and it was ruled by the Government of India, at the instance of the Government of Bengal, that for all pilots who may *hereafter* be admitted to the service the old rates should be maintained, as set forth in the last edition of the Civil Code, but that existing members should be allowed to pay the reduced rates which were authorized in 1873 under some misapprehension as to the conditions regulating these pensions. Of the existing members, those who already subscribe at the reduced rates for the family pension of a higher grade than that to which they belong were allowed to continue their subscriptions for such grade, but no other present or future member will be allowed to subscribe in any other grade than his own.

At the beginning of 1877-78 the following arrangements were in force for the supply of pilots to in-coming and out-going ships. At the Sandheads, in-coming vessels took the pilot who had been longest on board the brig waiting for a ship, subject only to the restrictions of the rules regarding grade and tonnage. Applications for any particular pilot were not forbidden, but were practically a dead letter, as commanders of vessels could not tell beforehand whether a particular pilot would be available, and therefore were compelled to take the pilot of the turn.

In Calcutta, however, an outward-bound vessel could apply for the services of any particular pilot, no matter what his grade, subject to certain restrictions, intended to prevent abuses and to distribute the work of the river as fairly as possible.

On a review of the whole question it was considered that although the system described above involved some abuses and irregularities, and was incompatible with the proper working of the Pilot Service as at

1877-78.]

present reorganized, still that it had been in existence so long that to abolish it summarily would cause considerable discontent among the parties most interested in the matter. In particular the mercantile community, as represented by the Chamber of Commerce, had always attached great importance to the right of owners to choose pilots in whom they had confidence when their vessels were leaving Calcutta with heavy cargoes of valuable merchandise. It was decided, therefore, to maintain the essential features of the existing system, merely introducing certain modifications, which may be summarised as follows:—

- (1) Mate pilots are to be restricted to their own tonnage except, with special permission, in the case of vessels which they have brought up.
- (2) Applications for pilots are to be submitted to the Port Officer, through the agents of the ship, and not through the master.
- (3) Junior masters are to be restricted to their tonnage until they had served six years in their grade, except in regard to vessels they have satisfactorily piloted, and then special permission is to be applied for.

It was further proposed to discontinue absolutely the existing right of return from the Sandheads to take up ships in Calcutta, and to confine the right to take up such ships to those pilots actually in Calcutta within four days of the ship's sailing. But after consulting the Chamber of Commerce, whose views were not in favour of this proposal, it was decided that for the present it would suffice to watch the effect of the modifications described above.

The following statement shows the number and tonnage of the vessels visiting the port during the last three years:—

Traffic of the port.								
YEAR.				Arrivals.	Tonnage.	Departures.	Tonnage.	Total vessels.
								Total tonnage.
1875-76	...	...	...	914	1,271,944	906	1,284,321	1,820
1876-77	...	...	...	1,161	1,696,701	1,121	1,598,250	2,282
1877-78	...	...	...	1,372	2,056,944	1,321	1,987,041	2,033

The increase during the year, both in the number of vessels and their gross tonnage, was very considerable. Comparing the returns with those of 1875-76, there was an increase of 873 in the number of vessels arriving at and leaving the port, and an increase in tonnage of 1,514,720 tons. Much of this was, no doubt, due to the number of short voyages to and from the ports of Madras and Bombay, made by the steamers and sailing vessels exporting rice from Bengal, to meet the demand in the distressed districts of those provinces; but, even apart from this, there was probably an absolute increase in the general business of the port.

The following statement shows the number of sailing vessels and steamers that entered and left the port in the last three years, as well as the number of each that passed through the Suez Canal :—

		1875-76.	1876-77.	1877-78.
Arrivals	{ Number of steamers	406	552	726
	{ " of sailing vessels	508	609	646
	{ " of steamers which came through the Canal.	149	161	165
Departures	{ Number of steamers	405	536	735
	{ " of sailing vessels	501	585	580
	{ " of steamers which went through the Canal.	134	147	159
Total tonnage inwards and outwards of steamers ...		1,454,261	1,915,577	2,637,992
Average tonnage of steamers		1,793	1,788	1,805
Total tonnage inwards and outwards of sailing vessels ...		1,105,001	1,349,374	1,405,993
Average tonnage of sailing vessels		1,405	1,130	1,141

Groundings, collisions,
&c.

The following table shows the total number of vessels entering and leaving the port, and the number of groundings and collisions during each of the last five years :—

				Vessels.	Groundings.	Collisions.	Total.	Percentage of accidents.
1873-74	...	...	...	1,927	68	10	78	4.05
1874-75	...	...	...	1,828	49	6	55	3.01
1875-76	...	...	...	1,820	45	7	52	2.86
1876-77	...	...	...	2,282	32	7	39	1.71
1877-78	...	...	...	2,693	56	11	61	2.27

The number of accidents in 1877-78 was much greater than in the preceding year, a fact to some extent accounted for by the pressure of work upon the pilots. But looking to the number of vessels piloted, the percentage of accident was less than in 1873-74, 1874-75, or 1875-76, and only .56 more than in 1876-77.

During the year under report one vessel was totally lost, and another, the *County of Berwick*, was abandoned by the owners, but was taken possession of by the underwriters, sold, and eventually floated. A third was rendered leaky and obliged to put back to port, and in the remaining 47 cases of grounding no damage was caused. The inquiries that were held on the fifty cases of grounding showed that 39 cases were accidental, that two were unavoidable, and that in nine cases the pilots were to blame. In three of the cases marine courts were held; in one case the pilot was found guilty of carelessness, in another of carelessness and negligence, and in the third case the pilot was acquitted. In six of the 11 collisions damage was caused to ships, while in five native crafts were sunk. In four out of the 11 cases the pilots were found to be in fault. In one of the cases a marine court was held, and the pilot, who was found guilty of unskilfulness, was sentenced to be reduced to half-pay for six months.

All cases of grounding and accident were inquired into departmentally; and when this inquiry showed the need, formal courts, either departmental or marine, were held.

Special courts under section 4 of Act IV of 1875 were convened to inquire—

- (1) into the loss by stranding of the ship *Winchester* on the coast of Orissa;
- (2) into the abandonment of the barque *St. George* at the Sandheads; and
- (3) into the collision between the floating light-vessel *Star* and the steamship *Africa*.

In the first case the court found the Captain guilty of negligence, in omitting to heave the lead while approaching land at night; in the second case the master was found guilty of misconduct; and in the third case the commander of the steamer was acquitted.

The work of the River Survey Department was carried on efficiently during the year. In consequence of some of the buoys in the Eastern Channel having disappeared and others requiring to be moved, a retriangulation from Saugor to the Sandheads was carried out, and a complete survey made, the chart of which was published. The Eden, Auckland, Dredge, and Bedford's Channels and Saugor Roads, were completely resurveyed. No special deterioration took place in the river as a whole, though individual channels changed their condition considerably. The buoys from Calcutta to the sea were put in good order, and the *Dolphin* buoy-vessel was employed in addition to other work in overhauling and painting the buoys on the Orissa coast, and in the recovery of stranded buoys from the Orissa coast and rivers. In September 1877 the steamer *Clyde* was substituted for the sailing vessels *Kedgerie* and *Marie*, and No. 3 paddle-steamer was attached to the survey as a tender. By the reduction of two sailing vessels and a number of row-boats a considerable saving was at the same time effected.

The pilot-vessels and floating light-vessels were kept in good order. In consequence of the Krishna Shoal light-house having been washed away, the floating light-vessel *Star* was sent down to guard the shoal. The port of Calcutta was thus left without a reserve light-vessel, but arrangements have since been made to supply this want.

The *Vulcan* anchor-vessel was employed during the year in recovering lost anchors and chains in the approaches to the port, and in assisting in the overhaul of the buoys in the Hooghly and Dhamra rivers. The cost of the establishment of the vessel amounted to Rs. 5,208, and a sum of Rs. 871 was paid to the crew and to fishermen-divers as salvage. The total earnings of the *Vulcan* by sale of recovered anchors and chains, &c., was Rs. 5,858. There was thus a slight deficit of Rs. 221, accounted for by the vessel being frequently employed on survey duties.

The houses of refuge were visited and thoroughly refitted and replenished with stores. It is doubtful, however, whether these houses and their stores can be adequately protected from thieves, for any length of time.

During the year 209 certificates of survey of steam-vessels were issued under the local Acts of 1862 and 1868, being 31 in excess of last year. At present only steamers engaged in local traffic are

ordinarily surveyed at Calcutta. The question of improving the system of survey and procuring the recognition of Calcutta certificates by the Board of Trade is now under the consideration of Government.

The results of the local examinations of candidates for certificates in engineering and seamanship were as follow :—

Nature of certificates.	Number of certificates.	Passed.	Fai
Master's voluntary examination in steam	2	1	1
First class engineer's certificate of competency	8	3	5
Second class ditto ditto ditto	3	2	1
Engine-driver's certificate	14	12	2
Master's certificate ...	9	5	4
First mate's certificate ...	20	6	14
Second mate's ditto ...	12	4	8
Only mate's ditto ...	2	1	1

An Act was passed during the year with a view to facilitate the working of section 213 of the Merchant Shipping Act, 1854, and 18 and 19 Victoria, chapter 91, section 16, whereby provision is made for the recovery by the Board of Trade of wages due to, and expenses incurred in, relieving distressed seamen and apprentices in foreign and colonial ports. These distressed seamen are in many cases natives of India, and belong to ships which are either registered in, or trade to, India, and which are seldom, if ever, found within the ports of the United Kingdom. In such cases the Board of Trade has considerable difficulty in recovering the sums expended. When the distressed seamen are natives of this country, these expenses are charged to the Indian revenues. The Act provides that the Government of India should be enabled to empower some person in India to sue for their recovery in case the ships or persons chargeable are found in this country. In Calcutta this power has, by notification in the *Gazette of India*, been conferred on the Shipping Master and Deputy Shipping Master of the port.

With the sanction of the Government of India new rules were introduced for the measurement of the tonnage of native craft under section 3, Act XI of 1850.

At the beginning of the year under report the commander of the *Seagull* reported that on his arrival at the Sandheads he narrowly escaped coming into collision with the light-ship owing to his mistaking the position of the light. The Trinity House system of showing lights was accordingly, with the approval of the Government of India, adopted.

The Health Officer of the port was provided with a launch, so that he was able to move about freely among the shipping and to make thorough inspections of all ships on their arrival. Inquiries were made as to the health of the crew during the voyage; the accommodation provided for the crew was inspected; whenever sickness was reported to have occurred on the voyage, the crew were mustered and each man minutely examined; if there was any reason to suspect that the crew had been provided with bad or insufficient diet, the provisions were carefully examined; whenever the hospital reports showed that

there was sickness on board any vessel, she was at once visited and advice tendered to the Captain as to the sanitary precautions to be adopted. During the year 701 vessels were thus inspected on arrival. Of these, 596 were British, 39 French, 84 American, 22 Arab, four Italian, three German, one Russian, one Swedish, and one Chinese. There were 16,177 seamen on board the 596 British vessels.

The accommodation provided for the crew on board recently-built British ships and on American vessels is said to be generally excellent; that on board most of the old wooden ships and canal steamers is insufficient and bad. The accommodation for the crews of French vessels is also reported to be very inferior, ill-ventilated, and generally very dirty. The crews of Arab vessels are not accommodated separately from their officers. During fine weather they live on deck, and during wet weather with the Captain and officers in the after-cabins.

The principal diseases from which the crews of vessels in the port

Diseases.

suffered during the year were malarious fevers, dysentery, diarrhoea, cholera, rheumatism, and typhoid fever. Malarious fevers prevailed most among the crews of vessels lying about Hastings and Kidderpore; the other diseases do not appear to have specially affected the crews of vessels moored at any particular part of the river. In 1876-77 it was noticed that, although far less than half of the shipping in the port is moored below Fort Point, fully half of the cholera cases of the year occurred in that part of the port, and it was suggested that the unequal distribution of cholera cases was due to the fact that ships moored below Fort Point lie between two sources of sewage discharge,—the Fort drain and Tolly's Nullah. In the past year it was found that out of 55 cases of cholera admitted into the General, Howrah, and Medical College Hospitals 26 were taken from vessels moored below Fort Point. Throughout the year the sewage of the Fort latrines passed daily into the river. The Government of India did not find it possible to carry out last year the unanimous recommendations of the Committee appointed to consider the question of the disposal of the Fort sewage. Active measures were taken by the Suburban Municipality to prevent the commission of nuisances along the banks of Tolly's Nullah and to improve the sanitation of the canal.

Outbreaks of scurvy occurred on board the following vessels (1)

Scurvy.

Lincelles (four cases), (2) *Savoir Faire* (nine cases), (3) *Jeanie Douglas* (two cases), (4) *City of Brussels* (five cases). In the first two cases the Health Officer found that the lime juice supplied to the crew was below the proper strength, but that the ship's provisions were good. The usual action was taken under section 64, Act I of 1859. The facts of the third case were similar to the above, but as the agents of the ships took immediate steps to provide a fresh supply of lime juice no action was necessary under the law. In the case of the *City of Brussels* the Health Officer found that not only was the lime juice weak in strength, but that the provisions were bad. In this case also action was taken under section 64, Act I of 1859.

Nothing has yet been done to fix a scale of provisions by law; but, from a communication received from the Board of Trade, it appears

that the standard of 28 grains of citric acid per ounce of unfortified juice is adopted by the Board as fair and reasonable. The quality of the lime juice supplied to ships in the port of Calcutta has recently been under consideration. An analysis of three samples obtained from firms in Calcutta showed that the quantity of citric acid varied from $17\frac{1}{2}$ to 20 grains per ounce of lime juice, and there could no longer be any doubt as to the necessity of prescribing a minimum percentage of citric acid allowable. At the advice of the Health Officer it has been directed that all lime juice supplied to ships in the port shall contain at least 25 grains of citric acid per fluid ounce.

The water used by the shipping in the port was supplied by the Municipality, and was always good. During the rains some difficulty was experienced by the

Commissioners in providing a sufficient quantity of water for all the shipping, as two of the country boats used for carrying water-tanks for the supply of vessels moored in mid-steam were wrecked. The difficulty was removed by the Commissioners hiring a Government famine steamer, and the Municipality have now built several large substantial water-barges to take the place of the old native boats. A small steamer will, it is believed, be used to tow the barges from ship to ship.

The Health Officer complained of the existence of a long list of nuisances along the river-banks that existed at the beginning of the year, but owing to the measures taken by the Port Commissioners and the Magistrates of Howrah and the 24-Pergunnahs they have nearly all been abated. The Magistrate of Howrah was ordered to see that the East Indian Railway Company provide proper latrines for the coolies employed at their coal jetties.

The fact that an unusually large number of dead bodies and carcasses had been found floating in the port was brought by the Port Commissioners to the notice of Government during the year. Orders were issued with the object of suppressing the nuisance. One hundred and fifty-nine corpses and 2,731 carcasses of various animals were found floating in the river within port limits, and were disposed of by the river police.

Though there are no quarantine regulations for the port of Calcutta, all vessels arriving from the Red Sea or the Persian Gulf with pilgrims were required to telegraph from Saugor the state of health of the passengers and crew. The Health Officer inspected the pilgrims on landing, and found them all in good health during the year of report.

The scheme sanctioned in 1876 for providing a floating hospital for the port was abandoned, as it was found on further consideration that, wherever the ship hospital might be fixed, it would for a great part of the day be in such a position that one-half of the shipping would have to send their sick in boats against the tide. Instead of having a floating hospital three doolies with bearers were placed near the river-bank at Prinsep's Ghât, the Sailors' Home, and Telkul Ghât at Howrah, so as to be always in readiness to carry urgent cases of sickness or accident from the shipping to the nearest hospital.

Up to the 31st March 1878 the Port Commissioners had spent, upon works of port improvement, including payments to Reserve and Insurance Funds, Rs. 79,31,653. This sum had been provided in the following manner:—

	Rs.
Loans from Government	53,95,100
Contributions from Government	74,584
From revenue	24,61,969
Total	79,31,653

Deducting repayments, the Commissioners' debt to Government amounted on the 31st March 1878 to Rs. 49,30,482.

The gross profits of these works up to the end of the year had amounted to Rs. 29,79,005, which had been expended thus:—

	Rs.
On new works	23,51,109
Repayment of loans	4,73,061
Jetty Reserve Fund	50,000
Insurance Fund	23,012
Cash balance	79,793
Total	29,79,005

During the year 1877-78 the total expenditure on improvements amounted to Rs. 7,19,395, distributed over the following works:— Extension of the jetty-heads, construction of an additional export shed, completing the 30-ton floating crane, additional engine and hydraulic cranes, pitching and widening Grey's Wharf, completing the river-side tramway, erecting a jute warehouse at Rath Ghât, procuring locomotives and wagons, completing the new office buildings, and other minor works. Further very important extensions and improvements of the jetty-heads are in contemplation, and some have been already sanctioned.

The dredging vessels have done more work than in any preceding year at very little more cost. Owing to the earnings of the barges in towing, the net cost of the dredging operations was Rs. 10,857 only, and the raisings 3,076,000 cubic feet, or at the rate of Rs. 3.5 per 1,000 cubic feet.

The jetties account shows a revenue of Rs. 8,00,521 and an expenditure of Rs. 4,25,807, leaving a net revenue of Rs. 3,74,624. The net revenue of each year since 1871-72 shows thus:—

	Rs.
1871-72	1,59,081
1872-73	1,65,655
1873-74	1,53,562
1874-75	1,43,165
1875-76	1,73,826
1876-77	1,83,229
1877-78	3,74,624

The increase last year was due entirely to the number of vessels discharging import cargo. So great was the demand for accommodation

that vessels wishing to load at the jetties could not always be allowed to do so, and there was an actual falling off in the receipts on account of exports. The number of vessels using the jetties was 232, or 40 more than in 1876-77; and had there been more room, more ships would have been glad to take advantage of it. Out of 365 days in the year, the jetties were occupied on the average 342 days, as against 280 in the year preceding. The cranes and other jetty appliances earned Rs. 92,315, of which Rs. 12,650 were paid for the use of the new 30-ton crane. The cost of working the cranes was Rs. 37,136, the average cost per hour of steam cranes being Re. 1-9-5, and of hydraulic cranes Re. 0-5-6.

In view of the large increase in the jetty revenue, the Commissioners were able to propose, and Government to sanction, a revised schedule of charges estimated to give a reduction of Rs. 52,000 per annum. The new scale took effect from the 1st August 1878. Looking to the very considerable amount of work of an unproductive character that has yet to be carried out before the port of Calcutta can be said to satisfy the requirements of its trade, the Commissioners are acting wisely in maintaining an estimated surplus of revenue to meet such charges.

During the year the jetty bye-laws were revised under legal advice, and an amended edition published with the approval of Government.

A correspondence passed between the Commissioners and the Chamber of Commerce on the one hand and the Bengal Government on the other on the subject of cargo-boats. Advantage was taken by the owners of these boats of the extraordinary demand caused by the shipments of grain for Madras and Bombay to raise their rates of hire to an unprecedented figure. There was a very general impression abroad that the construction of jetties and other port works had discouraged the building of cargo-boats and led to most of the difficulties felt by shippers at that time; and, under the irritation natural to the circumstances, the arrangements of the Port Commissioners were condemned as incomplete and inadequate, while charges of oppression and obstruction were somewhat recklessly made against both the police and customs authorities. The Port Commissioners, admitting freely that they were not able as yet to accommodate the whole trade of the port, showed that the number of cargo-boats actually plying in 1877 was greater by 894 than before the jetties were built, while many more boats were at the same time being built; and the result of very full and patient inquiry went to show that there was no ground whatever for the more serious charges of obstruction directed against the port authorities. The whole difficulty was explained by the simple fact that between January and June 1877 Calcutta exported 558,765 tons of rice and 138,218 tons of wheat, against 182,688 tons of rice and 56,703 tons of wheat in 1876, and, as might be expected, the appliances of the port were not fully equal to the strain. The Commissioners are rapidly extending their jetty accommodation, and the Government has recently placed the control of cargo-boats under their supervision, and taken steps to prevent anything like unnecessary interference on the part of the river police or other subordinate officials.

The receipts of the *inland vessels' wharves* (including the tramway) were Rs. 5,49,137, against Rs. 3,94,016 in 1876-77, and the expenditure Rs. 2,59,762, against Rs. 1,99,737. The increase was due mainly to the abnormal briskness of the trade in grain.

The income from the *Strand Bank lands* was Rs. 1,43,809, and the outlay under this head Rs. 1,00,423; the net revenue being Rs. 43,337, against Rs. 18,279. The rates receivable for these lands have increased, and sites are still in strong demand.

The financial position of the port at the close of 1877-78 was as follows. The value of the moorings, boats, &c., made over by Government stands as a permanent loan to the Commissioners of Rs. 17,65,000, carrying 4½ per cent. interest. A regular amount is annually written off for depreciation, amounting at the close of 1877-78 to Rs. 2,87,608 in the aggregate. Against this Rs. 1,71,866 have been invested in Government promissory notes, and Rs. 87,600 spent in renewing boats, leaving a cash balance of Rs. 28,134 to credit of the depreciation account. Besides this, 3½ lakhs of rupees have been invested in Government promissory notes to meet any extraordinary losses that may at any time be caused by a cyclone. After providing for the foregoing funds, the balance of the profits of the port has been spent in adding to its stock. Up to the end of 1876-77 Rs. 2,46,310 had been so spent, and in 1877-78 Rs. 1,16,309 were set aside for a similar purpose.

The income of the port during the past year was Rs. 6,90,873, and the expenditure Rs. 4,70,839, giving a net revenue of Rs. 2,20,034, against Rs. 86,742 in 1876-77 and Rs. 5,620 in 1875-76. The foregoing figures, however, include receipts from sales of cargo recovered from the wreck of the *Asia*, for which the Commissioners have to account to those interested. The balance of the *Asia* accounts so to be made over amounts to Rs. 79,791, which must be deducted from the net revenue in order to get the true balance to credit of the port.

The very favorable results of the year's working were due to the extraordinary influx of vessels to the port in connection with the Madras famine. No fewer than 1,372 vessels of a gross tonnage of 2,056,944 entered the port, while 1,522 with a tonnage of 1,988,987 left it. The average tonnage of each vessel was 1,500 tons, as against 1,450 in 1876-77. The following figures show the employment of the steamers entering the port in 1877-78:—

	No.	Tonnage.
Suez Canal trade	171	417,604
Coasting and Eastern trade	331	494,055
Famine transports	224	402,946
Total	726	1,314,605

The average tonnage of each canal steamer arriving was 2,442 tons.

The work which fell on the Harbour Masters' Department during the year was singularly heavy; but, owing to the present extensive use of steam appliances on vessels of all kinds, it was performed without any extra establishment, and with singularly few casualties. There were

only eight accidents altogether in dealing with 1,372 vessels entering the port and performing 9,710 operations of mooring, hauling, docking, &c.

The steam fire-vessel was kept under steam throughout the year, but was required to attend only two fires on ship board and three on the river-bank. In all cases the fires were got under without serious loss.

The Commissioners recovered 42 anchors and 657 fathoms of chain cable lost by vessels within the limits of the port: 21 anchors and 380 fathoms of cable were restored to owners, and 26 anchors and 203 fathoms of cable sold for Rs. 1,820.

The Commissioners realized for Government on account of pilotage fees, buoyage and lightage, hospital dues, &c., the sum of Rs. 14,75,341, the payment to them for this service being Rs. 3,500 only.

The work of overhauling the moorings was greatly hampered by the crowd of shipping in the port; and the necessity for increasing considerably the amount of mooring accommodation, especially for long vessels, has been pressing itself upon the attention of the Commissioners. Eighteen new moorings were, with Government sanction, laid during the year, and further proposals are under submission. The attempt to dredge clear the silted up moorings below Fort Point was not attended with much success, and the Commissioners have frequently urged that, unless the current be turned in upon the bank by certain alterations of the Fort Point, they cannot hope to recover and utilize these berths.

The trade of Chittagong, which had been declining for some time, showed signs of reviving during the past year.

Various causes operated to produce this result, the chief being the Madras famine and the demand for Chittagong rice in Bourbon and Mauritius, and the opening up of a direct trade with Europe in jute brought to Chittagong from Naraingunge. The following comparative statement of the number and tonnage of the vessels visiting the port during the last two years shows an increase of 212 vessels and 26,114 tons:—

PARTICULARS.	1876-77.		1877-78.		Increase.		Decrease.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
European vessels trading with Europe	5	4,067	6	5,780	1	1,713	...	...
Ditto foreign trade	16	6,896.55	17	8,063.77	1	1,167.22	...	...
Ditto coasting do.	7	2,980.67	17	8,984.7	10	6,004.03	...	...
Chittagong vessels	40	9,817.52	37	8,856.6	...	...	3	980.92
Other native do.	5	1,391.14	5	1,128.85	...	...	...	262.29
Naraingunge inland trade	41	3,753.6	92	14,325.8	51	10,572.2	...	...
Mail steamers	68	27,925.68	70	31,613.08	2	3,687.4	...	...
Trading do.	...	...	2	1,147	2	1,147	...	...
Ballam boats	1,609	23,820.75	1,754	26,887	145	3,066.25	...	...
Total	1,791	80,652.91	2,000	1,00,766.8	212	27,367.1	3	1,243.21

The number of European vessels employed in the coasting trade rose considerably, and there was a remarkable extension of the inland trade with Naraingunge. There was also an increase in the number of ballam boats, which are largely employed in the Naraingunge business.

It was remarked in the report for 1876-77 that the decline in the grain trade of Chittagong had been continuous since 1872-73. In 1876-77 the trade seems to have fallen to its lowest point, and it may be hoped that the results of the past year indicate the commencement of progressive improvement, and are not due merely to a spasmodic and temporary impulse, though, no doubt, trade was much stimulated by the demand for Madras and Ceylon. The following statement shows the amount and value of the exports of grain, the staple produce of the district, during the last two years:—

			Tons.	Value. Rs.
1876-77	...	...	18,659	11,85,508
1877-78	...	...	25,083	19,89,961

The total increase in the past year amounts to 6,424 tons, valued at Rs. 8,04,453, of which 2,002 tons, valued at Rs. 3,47,506, were sent to foreign ports, and 4,422 tons, worth Rs. 4,56,947, were shipped to ports within British India. Most of the home export was taken by the small ports on the Coromandel coast of Madras, while the bulk of the foreign export went to Mauritius and Bourbon. The increase in exports appeared to show that the trade had recovered from the serious disturbance caused by the cyclone of 1876, which not only destroyed a large proportion of crop which otherwise would have been available for export, but also injuriously affected the internal communications of the district and the entire mechanism of export trade.

Concurrently with the increase of exports the staple imports seem to have declined. The imports of salt fell from 5,565 tons to 4,391 tons, and those of earth-oil from British Burmah from 693 tons to 460 tons. Salt imports were stated to have fallen off in consequence of mismanagement on the part of the local bonders, who declined early in the year to import salt, because freights were high, and subsequently were unable to arrange for a cargo, because the importing vessel would have been unable to secure a return freight. The reduced imports of earth-oil were attributed to the impoverished state, in consequence of the high prices of food, of the poorer classes of the district, from whom the demand for this oil ordinarily proceeds.

The following statement exhibits the receipts and expenditure of the port for the last two years:—

					Rs
Receipts	{	1876-77	...	...	19,708
	{	1877-78	...	...	24,840
Expenditure	{	1876-77	...	...	27,627
	{	1877-78	...	...	32,524

There was a considerable increase in the receipts from port dues and from fees for pilotage, owing to the larger number of vessels which visited the port. The balance of the credit of the Port Fund as reported by the local authorities on the 31st March 1878 amounted to Rs. 27,745, which shows that the financial position of the port is sound. Under the head of expenditure the charges for the Kutubdea Light-house rose by Rs. 543 in consequence of the grant of enhanced salaries

to the establishment; but the bulk of the increase shown above was due to the heavy Public Works charges for the repair of the embankments, and for special works designed to protect the light-house from tidal influence. These appear to have been thoroughly successful. Considering the enormous expense which the removal of the light-house would entail, and the difficulty of finding a satisfactory site for it, this is a matter of vital interest to the port. The screw-pile jetty was not erected during the year, and there was some difficulty in obtaining tenders for the work. There were no complaints regarding the Kutubdea Light, and the commanders of mail steamers expressed their approval of its illuminating power.

Orders were issued in 1877 directing the removal of the Norman's

Port lights.

Point lights one mile and a half further south.

The change appears to have been a beneficial one, as in their new position the lights serve the double purpose of marking the bar as well as the coast line. Some saving of expense will also result, as the new site is sheltered from tidal action and no protective works will be required.

Dock-cutting in the river-bank has now been prohibited, and the

Conservancy of the port.

provisions of the Indian Ports' Act and the Port Rules are strictly enforced. Twenty-four pro-

secutions were instituted during the year for offences connected with the port, and in one case a fine of Rs. 500 was inflicted for omitting to refill an excavation which had been allowed to be made in order to relaunch a vessel driven on shore by the cyclone.

On a general review of the operations of the year in Chittagong there seems to be much which affords a fair promise of a permanent expansion of the trade in future. Hitherto the chief obstacle to vessels visiting Chittagong direct from Europe has been the difficulty of securing a return freight. The local authorities believe that there is some prospect now that the development of the Naraingunge route will render it possible to offer jute cargoes to vessels arriving from Europe, and this may eventually result in sending direct to Chittagong the extensive imports of cotton goods which now pass through Calcutta. These were valued last year at Rs. 8,93,668, and it would be well worth shippers' while to consider the possibility of diverting this valuable trade to Chittagong itself.

The loan of Rs. 30,000 for the improvement of False Point, which

Orissa Ports.—False Point.

was mentioned in last year's report, was sanctioned by the Government of India during the year, and the question of the best way of spending the money was fully discussed during the Lieutenant-Governor's visit to Orissa. It was decided to build (1) a bungalow for the port officer and his family; (2) a customs and port office combined; (3) new buildings for the customs preventive officer; (4) a house of refuge capable of accommodating 20 souls; (5) a dāk bungalow on Dowdeswell's Island. It was also decided that the boat creek should be deepened, and that groynes should be thrown out on the east shoulder of Dowdeswell's Island, in order to bring about an accretion of land in a north-east direction to prevent and arrest the northerly advance and inward curvature of Point Reddie, which were brought to notice by Captain Taylor, Superintendent of Marine Surveys,

during the previous year. The light-house at False Point will be provided with a first class light. At Jambu it was not considered advisable to do anything at present beyond keeping the land clear of jungle and reserving space for Government buildings in the event of their ever being required there. Lots are, however, to be marked out both for lease to merchants and traders desiring to open out warehouses there, and for a bazar in case one is established there, which may possibly be the case when the creek communication with Chandbally and Poorée is improved and the Kendrapara canal opened out. Moodies and shop-keepers will be encouraged to settle there, and an annual grant of Rs. 500 will be made from Provincial Funds for the purpose of keeping the site clear of jungle. The Commissioner of Orissa was also informed that if some systematic plan could be devised for draining and clearing Jambu and making a few good raised paths in it a sum of Rs. 2,000 would be made available from the same source. In connection with these improvements may be mentioned the liberality of the Maharanee of Burdwan, who owns the Coojung estate in Orissa. She has made over to the Government, for the purpose of these improvements, a tract comprising over 8,000 acres of land. In order to prevent any future complication, and to give Government a secure title in the lands thus made over, the Maharanee consented to their formal acquisition by Government under the Land Acquisition Act for a merely nominal price.

The difficulties hitherto felt by vessels proceeding up the comparatively unknown Dhamra and Byturnee rivers to load at Chandbally were remedied by the organization of a native pilot service at Dhamra of two pilots (on Rs. 40), two apprentices (on Rs. 20), and two boatmen (on Rs. 10) at a cost of Rs. 140 per mensem. A house is to be erected for them at Dhamra, where a tank is to be improved and two wells dug, and they are to be provided with a life-boat. The scheme and the scale of pilotage fees fixed by this Government have received the sanction of the Government of India. A weekly steam service has been established between Chandbally and Cuttack *via* the Kendrapara and Gobree canals.

IV.—PRODUCTION & DISTRIBUTION.

Meteorology of Bengal.

THE system of meteorological registration established in the year 1875-76, in accordance with the orders of the Government of India, was closely adhered to in 1877-78, some slight additions being, however, made to the current duties of the department. No important changes were introduced either in the method of observation or in the number of the observatories. Very accurate results were obtained from the majority of the existing stations.

Meteorological Observations.—By the arrangements which are now in force in the department, the observing stations are divided into four classes—first, second, third, and fourth class.

First Class Stations.—First class stations are those which are provided with self-registering apparatus, and with facilities for testing and comparing meteorological instruments. There is only one first class station in Bengal, viz. the new observatory at Alipore, and this is now in fair working order. The self-recording instruments which were there erected now furnish a complete and continuous record of all the changes of atmospheric conditions at Calcutta. They give a continuous record of atmospheric pressure, temperature, humidity, and rainfall, as well as of the velocity and direction of the wind. Of the two first conditions the continuous record is obtained by photography, and the process on the whole works satisfactorily, although it required very close superintendence during the past year.

In addition to the important records now obtained by the self-registering instruments abovementioned, the department possesses in this observatory every facility for the comparison of instruments to be issued to other observatories; and every instrument now in use in all the Government observatories has been thoroughly and rigorously compared with standard instruments, and the errors are accurately known. In future no fresh observers will be appointed to out-station observatories until they have received, under the immediate superintendence of the Reporter, a thorough training in all the methods of observation and manipulation requisite for meteorological work.

Special steps were adopted during the year at the observatory for testing the temperature of the air at different levels, and the temperature of the earth at various distances from the surface, and it is believed that valuable results will be obtained from these observations.

It having been decided that the arrangements for dropping the time-ball should be transferred from the Surveyor-General's Office in Park Street to the Alipore Observatory, a transit-room was commenced in January 1878, in a convenient position close to the main building. The erection of this building will shortly be completed.

Second Class Stations.—At the second class stations, with the exception of Saugor Island, three observations are taken daily, at 10 and 16 hours as in previous years, and also at 7-35 A. M., Washington mean time, and on four days in the month hourly observations during the whole day and night are made. At Saugor Island, a very important sea-board station, six hourly observations are recorded daily.

At the present time there are seven second class stations instead of eight, as in the previous year, False Point having been reduced to a third class station.

Third Class Stations.—At the stations of this class observations are recorded twice a day, at 10 hours and 16 hours. Formerly these stations were ten in number, but owing to the reduction of False Point from the second class in October last there are now eleven. Telegraphic communication having been established with this station, the telegraph master has been put in charge of the meteorological observatory, and daily reports by telegram are now received from that station.

The third class stations are in fair order, but some of the observers still show a want of care and attention in making their observations and reports.

Fourth Class Stations.—These stations only record the rainfall and submit weekly returns to the Meteorological Reporter. No changes have been made in the number of rainfall stations, and at present returns are received from 150 stations in Bengal and from 4 in Assam, in all from 154 stations.

The atmospheric pressure during the greater part of the year was considerably in excess of its normal amount. At Darjeeling the mean monthly pressure was in excess during the whole year, so that the increased pressure of the year appears to have been a more marked feature of the higher atmospheric strata than of the lower. This increased pressure was probably partly due to diminished air motion. One important factor in the functional relation connecting pressure with the other physical conditions of the atmosphere is the velocity of the air motion, the relation being generally that, with similar conditions of density and temperature, pressure diminishes with increased velocity. Another important factor is the temperature of the air. The primary and essential result of increasing the temperature of a mass of air is to increase its pressure. But if the condition of the heated mass of air is such that expansion follows, then experience shows that increased temperature is accompanied by diminution of density, and also by diminution of pressure, and *vice versa*. These inverse relations of temperature and atmospheric pressure were strongly marked throughout the year.

The mean monthly pressure during the first seven months was uniformly in excess. The excess in January and February averaged '075" for the province. In March it was less, varying in amount

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Atmospheric pressure.

from $\cdot 02''$ at Hazaribagh to $\cdot 06''$ at Gya. During April and May the average excess was nearly as great as in January and February, averaging $\cdot 06''$ for the two months, and varying in amount from $\cdot 04''$ to $\cdot 08''$. The excess in June and July was less, averaging $\cdot 035''$ for the province. The distribution of pressure was different during this period, the commencement of the rains, from that which prevailed in the early months of the year. During the first four months the pressure was relatively lowest at Hazaribagh and its neighbourhood and in Orissa, and highest at Calcutta and in Eastern Bengal. In the month of July Eastern Bengal became the area of relatively lowest pressure, whilst Hazaribagh and Orissa became the areas of maximum pressure. In August the pressure at every station was in defect, except at Darjeeling. The defect was greatest in Eastern Bengal, where it averaged $\cdot 035''$. It was least in Behar, where it only amounted to $\cdot 01''$. The pressure during the two remaining months of the rains was again everywhere in excess. The average excess in September was $\cdot 05''$. In Behar the excess was least, amounting to only $\cdot 02''$, so that the area of lowest relative pressure was now transferred to Behar. The pressure in October was $\cdot 07''$ above the average. Behar still continued to be the seat of lowest pressure, the excess being $\cdot 055''$ for that area. The pressure during the remaining two months was slightly in defect, except at Darjeeling. The distribution of pressure at the end of the year was very similar to that of the early months, Orissa being again a region of relatively low pressure and South-Eastern Bengal of high pressure. Thus in December the defect at Cuttack was $\cdot 036''$, whilst at Chittagong the pressure was $\cdot 002''$ and at Calcutta $\cdot 005''$ in excess.

The mean temperature of the year was below the average. This was mainly caused by continuous low temperature. Temperature. which prevailed during the first six months of the year, and was, as is usually the case, accompanied by increased air pressure. The variation of the temperature of January from the mean temperature was inconsiderable. The temperature was at the majority of the stations in defect, more especially at Saugor Island and False Point, where it was upwards of 1° below the average. The month of February was characterized by abnormally low temperature. The means for the month were only very slightly in excess of those for January. The defect varied from $3\cdot 2^\circ$ at Chittagong to $5\cdot 3^\circ$ at Berhampore. Behar was at this time the area of lowest temperature in the province. The lowest temperatures of the months were recorded between the 10th and the 17th. The absolute range of temperature during the month of February was excessive. It was greatest at Akyab, where it amounted to $41\cdot 3^\circ$, and exceeded 40° at the two observing stations of Patna and Burdwan. The mean temperature continued to be below the average during the next three months. Behar was during the whole period the area of the greatest defect of temperature. The mean temperature of Behar was $2\cdot 5^\circ$ below the average during the month of March, $4\cdot 5^\circ$ during the month of April, and $2\cdot 5^\circ$ in May. During the first and second week of May the area of maximum day temperature had advanced from the Deccan to Behar and the most eastern portion of the North-Western Provinces. It was during this period of maximum temperature in Behar that the

cyclone which visited Madras and its neighbourhood on May 18th to 23rd was generated. The mean temperature of the province during the months of June, July, and August varied slightly from the average of previous years. The variation was greatest in Behar, this district now forming an area of relatively high temperature. The abnormal features and distribution of the rains during this period account for the increased temperature in Behar. The excess was on an average 2° for this period in Behar. The temperature was in excess during the remainder of the year at the majority of stations. Behar continued during the whole of this period to be the region of highest temperature and of greatest variation of temperature from the mean. The excess in September and November in Behar was 3.5° for each month, and in the two remaining months it was 1.5° . The returns of Saugor Island and Calcutta show that the temperature at the north-west angle of the Bay was also excessive during the latter months of the year, so that it formed a second and smaller area of high temperature.

The mean wind directions during the year were very nearly normal. The northerly element of the dry weather winds was more strongly marked than usual. The most important feature in the anemometry of the year was the diminished

Stations.	Mean 1877.	Mean.
Cuttack ...	78.6	76.8
Saugor Island...	229.3	232.8
Chittagong ...	124.3	138.2
Jessore ...	73.5	82.7
Patna ...	41.9	78.8
Calcutta ...	120.1	131.9

velocity of the lower air currents. The table in the margin gives the comparison between the daily velocity for the year 1877 and the mean daily velocity at a number of stations. The diminished velocity was most strongly marked in April and May and towards the end of the year. The tendency towards a state of approximate equilibrium of atmospheric condition around and near the coast of the Bay of Bengal, which, often, if not always, precedes the formation of a cyclone, was very strongly marked before the Madras May cyclone. The table in the margin gives the comparison of the average daily velocity of

Stations.	April 1877.	April mean.
Cuttack ...	100.1	126.9
Saugor Island ...	295.4	370.1
Chittagong ...	149.4	184.3
Jessore ...	91.3	120.2
Patna ...	81.3	123.8
Hazaribagh...	186.0	175.7

the average of previous year. The returns of the wind velocity during the rainy season show that the lower air currents were less vigorous than usual in Behar and Central Bengal. The table in the margin gives the comparison of the average daily velocity during the months of July, August, and September with the average of previous year. The termination of the rains was followed by a more quiescent condition of the atmosphere than usual. The table in the margin shows the average daily velocity at selected stations in the month of December as compared with the mean velocity based on the observations of previous years.

Stations.	December. 1877.	Mean.
Chittagong ...	72.4	100.4
Jessore ...	42.6	43.4
Saugor Island ...	144.7	132.4
Patna ...	28.3	44.0
Hazaribagh ...	136.2	97.6

The sub-division of Tumlook was visited by two thunder-storms of a very severe character during the first week of February, which caused much destruction to life and property.

Storms.

An unexceptionally severe storm visited False Point and its neighbourhood on the 8th of April. It blew a perfect hurricane, and the wind veered round the compass in such a manner as to indicate that it was a small cyclone. There were very violent wind squalls with heavy thunder and lightning and torrents of rain from about 1 P.M. to 5 P.M. During this brief space of four hours 13·75 inches of rain were recorded at the light-house. The Madras cyclone of May 18th, as has been already stated, extended to Behar and Bengal on the 21st, 22nd, and 23rd, and was accompanied with stormy weather and heavy rainfall over the greater part of the province.

The termination of the south-west monsoon was exceptionally free from stormy weather.

The rainfall during the dry weather months, January to May, slightly exceeded the average. Behar and Orissa were the two areas in which this excess was relatively greatest. The rainfall in Bengal during January was very slightly above the average. February was marked by a much greater rainfall over the whole province than usual. The rainfall of March differed very slightly from the average, except in Behar and Orissa, where it was in excess. April was characterized by much heavier rainfall than usual. Thus, for example, Burrisal, which has a mean fall of 2·79 inches, experienced 13·06 inches; Noakholly 5·25, instead of 3·88 inches. Orissa and the greater part of Bengal had more than the average rainfall. The rainfall in Behar differed very slightly from the average, and is always insignificant in amount at this time. The rainfall for the month of May was very considerably in excess, more especially in a narrow area extending from Patna to the western flank of the Jaintea Hills. The cyclone which visited Madras and its neighbourhood on the 18th of May advanced first of all along the coast and across Chota Nagpore, and diminished gradually in intensity until the 20th, when it again increased with the commencement of very heavy rainfall in Bengal and Behar, and then advanced eastwards, finally dying away near the western flank of the Jaintea Hills. The rainfall in the Gya district averaged 9 inches for the month, and for the Patna district 6 inches. The normal rainfall in Behar for the month is 1·3 inches. The rainfall in the Rajshahy district and in Cooch Behar was nearly double its usual amount. The rains commenced in the beginning of June along the coast and over Bengal, but advanced very slowly westwards up the Gangetic plain, extending to Behar in the first week of July. They were abnormally heavy in Burmah and the adjacent British districts, including Eastern Bengal, and gave an average supply to the greater part of Bengal and portions of Behar. The rain supply was deficient in the districts of Cuttack and Poore in Orissa, and in the districts of Shahabad, Sarun, Champaran, and Monghyr in Behar. The monsoon rain current from its diversion to the east towards Burmah was very feeble during the rains, and failed to advance as far west as the North-Western Provinces. The rain supply of that province was derived almost entirely from the

Rainfall.

current from the Arabian Sea advancing across Central India. The rainy season of 1877 in Bengal was marked by a succession of feeble cyclonic disturbances, which advanced from the mid Bay generally towards the east coast of the Bay. These cyclonic disturbances, after reaching the coast, were usually deflected to the west. They first gave heavy rain to the Arracan coast, and then a feebler supply to Bengal, and occasionally advanced as far west as Behar. The rainfall during the greater part of the rainy season occurred during the advance of these cyclonic disturbances, and the weather in the intervals between successive storms was usually fine, although cloudy and moist.

The rainfall during June was very irregularly distributed. It was above the average in the Dacca division. Over the other divisions of Bengal it was slightly below the average; whilst over the greater part of Behar it barely averaged one inch. The mean rainfall for Behar is 7 inches in June. The rainfall in Orissa was also below the average. The rainfall during the next month was abundant and fairly distributed. It was excessive in the Dacca and Chittagong divisions, over the greater portion of which it was nearly double its normal amount. In the other divisions of Bengal the rainfall was slightly above the average. It was irregularly distributed in Behar; the districts of Shahabad, Gya, and Mozufferpore suffered from a deficient supply. The rainfall in Orissa was in this, as during the remaining months, somewhat below the average. The general character of the rainfall distribution of August was very similar to July. The Dacca and Chittagong divisions continued to experience very heavy rainfall. Thus at Chittagong, where the mean rainfall for the month is 21.89 inches, 41.35 inches were registered. The rainfall was over the average in the remaining divisions of Bengal, except in Rajshahye and Cooch Behar, where it was much below the normal amount. It was deficient over the whole of Behar, which received a mean fall of 5 inches instead of 10, the normal amount. The rains were very irregularly distributed during the month of September. The rainfall in the Dacca and Chittagong divisions was slightly above the average. In the Burdwan and the Presidency divisions it was considerably below the average. Rajshahye experienced a very heavy rainfall, which compensated for the deficient supply of the preceding month. Behar again suffered from a defective supply, more especially in the Shahabad, Sarun, and Chumparun districts. The rainfall during October was above the average in Behar. This was due to heavy rainfall, which accompanied a cyclonic disturbance that began on the Bombay coast and advanced eastwards to the North-Western Provinces during the second week of the month. The rainfall over the whole of Bengal was slightly below the average. The rains, practically terminated in Cooch Behar at the end of September, and about the 15th of October over the remainder of the province. The amount of the rainfall was excessive in the districts of Eastern Bengal. The table in the margin gives a comparison of the rainfall for 1877 with the mean rainfall at several stations.

Stations.	Mean.	1877.
Dacca	71.12	88.07
Goalundo	54.49	88.93
Burrisal	73.22	88.01
Chittagong	101.99	124.98
Noakholly	103.76	122.47
Rangamati	91.73	133.06

It was fairly up to the average, and well distributed in Bengal and Chota Nagpore. In Behar the districts of Gya, Shahabad, Sarun, and Chumparun suffered from a defective supply. Orissa also during the whole of the rainy season experienced a diminished rainfall. This was most marked along the coast south of Pooree. The table in the margin gives the comparison for Orissa.

Stations.	Mean.	1877.
Cuttack	56.83	41.13
Pooree	55.10	35.15
Khurdah	66.93	42.67

Weather, Crops, and Prices.

THE following is a brief account of the results of the harvests, of the prices, and of the condition of the people during the year in the different divisions of the province.

The rainfall in this division was somewhat below the average, but was very evenly distributed over the districts. Burdwan Division. In Burdwan the greatest fall was in the Jehanabad sub-division, where heavy rain fell towards the close of August and the commencement of September, in consequence of which the rivers Damoodah and Dwarikessur overflowed their banks, and in some places did considerable damage. The early cessation of the rains in October almost everywhere in the district, damaged the rice crop to a certain extent, more especially that portion which was grown on high lands. In Bankoora the rainfall was rather above the average of the district. About the middle of September over nine inches fell in one week and caused a heavy flood in the rivers, but not much harm was done to the crops. After this the rain fell off and became insufficient until the middle of October, when prospects brightened. In Beerbhoom the weather was normal, and in Hooghly the rain was seasonable and fairly distributed, but in the month of September there was some want of rain. The rainfall at Howrah was slightly greater than in any other sub-division of the district, and in Moheshrekha, which is the lowest part of the district, there were inundations in different parts of thanas Ampta and Khanacool, which caused some local loss. In Midnapore the rainfall was much smaller than in the two preceding years, and was not favourably distributed.

The average outturn of the rice and other crops for the whole division was, if anything, somewhat above an average crop. In Burdwan and Hooghly the rice crop was an average one, and in Bankoora and Beerbhoom it was above the average. In Midnapore it was a little below. The outturn of the *rubbee* crop was on the whole fair. In Howrah the outturn of the amun crop was a little below the average.

The material condition of the people during the year may be described in general terms as good. The good harvest reaped during the year, preceded as it was by the still larger crop of 1876-77, coupled with the rise in the price of rice consequent on the Madras and Bombay famines which prevailed throughout the year, brought considerable profit to the agricultural, manufacturing, and trading classes, and even in some cases to day-labourers; but for persons with fixed incomes the year was one of some pressure and difficulty.

Owing to the great demand for rice in the famine tracts high prices obtained during the year throughout the division, as will be seen from the following statement:—

Districts.						Rice per rupce, 1876-77.	Rice per rupce, 1877-78.
						S. c.	S. c.
Burdwan	...	...	...	...	...	22 2	15 10
Bankoora	...	...	...	...	...	26 8	20 0
Beerbhoom	...	...	...	...	...	25 5	17 5
Midnapore	...	...	...	...	...	24 12	16 4
Hooghly	...	...	...	...	...	19 9	13 1
Howrah	...	...	...	...	...	18 6	

Other necessities of life were also dear, and in most places, if not everywhere in the division, there was a corresponding increase in the cost of labour of all kinds, excepting in the case of persons employed on fixed wages by the month or year.

Generally speaking, the rainfall in this division was abundant during the first half of 1877-78, but was exceedingly scanty, or failed altogether, from the middle of October to the end of the year. This affected injuriously the cold-weather crops, but the outturn of the other crops was, as a rule, not less than the average. The year was, however, a most prosperous one for the agriculturists owing to the great demand for food-grains for exportation to Madras.

In the 24-Pargunnahs district the abundance of the rains in the first half of the year produced a full yield of the jute crop, and gave great promise for the *aman* or winter rice, which is the staple of the district. The outturn of this crop did not, however, realize the anticipations that had been formed of it, owing to the failure of the rain just when it was wanted to bring this crop to perfection. Still, after making due allowance for the adverse weather, there was on the whole a fair average harvest of about thirteen annas. The early rice crops, which form but a small proportion of the food-supply of the district, yielded an average outturn of twelve annas. The cold-weather crops suffered rather more, as they were of course unbenefited by the copiousness of the early rain. The yield of the date-trees also was only moderate. In the Baraset sub-division the cultivation of jute is reported to be rapidly supplanting that of early rice; the cultivation of sugar-cane is increasing; the ryots have introduced improved methods of extracting the juice from the cane. In the Busseerhat sub-division a new sugar refinery has been started during the year. There is in both the Satkhira and Busseerhat sub-divisions a very extensive cultivation of date-trees: and in the Barnipore sub-division it is stated that there are no less than 1,331,000 of these trees, yielding about 2,44,800 maunds of molasses, or 83,100 maunds of sugar.

The showers which fell in July and August 1877 were unusually heavy all over the Nuddea district, so much so that 9.6 inches fell in one day of July in the sudder sub-division, and 11.13 inches fell in

one day of August at Kooshtea. During September much rain fell in the last mentioned place, and a small quantity over the whole of the district; but about the second week of October there was a sudden cessation of the rains, and from this time till the end of February 1878 there was little or no rain, though in March a small quantity fell. The consequence of this unpropitious weather was that the outturn of the early rice crops was above, while that of the late rice was considerably below, the average. The failure of the late rice is attributed to the long continuance of the hot weather, the unequal distribution and sudden cessation of the rains, and the occurrence of floods. The yield of some of the cold weather crops, such as linseed and mustard, was also smaller than in previous years. Indigo was a poor crop, and wheat also was bad; but chilli, sugarcane, and tobacco, gave a fair return. Upon the whole the cold weather crops were considerably below the average.

Except in the Magoorah sub-division of the Jessore district the rainfall was everywhere in that district much smaller than in the previous year. Even in that sub-division most of the rain fell in the early part of the year, and thus prevented the cultivation and sowing of the lowlands. The rainfall not having been seasonable, the winter crops were stunted and poor. The *aous*, *boro*, and *amun* rice crops, the staple products of the district, were likewise below the average. In the Bagirhat sub-division considerable damage was done to the *amun* crops by a species of insect called *medhas*, which severed the stalks and preyed on the softer portion of the plants. The outturn of indigo, which is one of the most important agricultural products of this district, was also very indifferent. In many factories the profits derived from its manufacture were barely sufficient to meet the year's outlay, and in consequence several factories managed by natives were closed. The manufacture of date sugar and *goor* is the next most important industry of the district, and this appears to have given a fair return, particularly in Jhenidah, where it is most extensively carried on.

The crops of the Moorshedabad district were generally above the average. The outturn of indigo, rice, and mulberry has been fair. Some of the *amun* on high lands was damaged owing to want of rain at the end of October, while a portion of the *aous*, then in full ear, was damaged by inundation in August.

Taking the division as a whole, the year under report was one of progress and increased prosperity both for ryots and handicraftsmen. This is apparent from the fact that, as a rule, these people are now better clothed and better housed than they were; that they are able to spend more money upon marriages and other social ceremonies, as well as upon ornaments for their families and upon other luxuries. But perhaps the strongest possible proof of their improved condition is the way in which they stood the high prices which prevailed for many months of the past year.

The average price of common rice in the 24-Pergunnahs district was 13 seers 13 chittacks per rupee during 1877-78, against 18 seers 7 chittacks per rupee in the preceding year. The main cause of this was, of course, the great demand that there was for food-grain for

exportation to Madras, Bombay, and the North-Western Provinces. The prices of the other important products of the district are shown below :—

							Rs. A.
Wheat	...	...	...	...	...	...	3 12 per maund.
Linseed	...	...	...	...	...	...	5 0 "
Jute	...	...	...	...	...	...	4 0 "
Sugar	...	...	...	...	...	...	13 0 "

The price of unskilled labour is reported to have been Rs. 6 to Rs. 8 a month during 1877-78. The rates for skilled labour were as follow :—

						Rs.
Blacksmiths and carpenters	...	...	...	...	...	12 a month.
Goldsmiths	...	...	...	...	...	Rather more.
Bricklayers	...	...	...	...	...	10½ a month.

The price of rice ranged from 10 seers 7 chittacks per rupee in the sudder sub-division of the Nuddea district to 20 seers 10 chittacks per rupee in the Bongong sub-division. The price of labour varies a good deal in this district : it is lower in those portions which are more remote from the line of railway. The lowest price of unskilled labour is about two annas per diem, and the highest about five annas. Handicraftsmen of the lowest classes generally are paid four or five annas per diem, while artisans, such as blacksmiths, &c., obtain from four to eight annas.

In the Jessore district the average price of common rice was 14 seers 9 chittacks, and of wheat 11 seers 13 chittacks per rupee, during the year under report. The prices of food-grains in the commencement of the year were not very much above those of an ordinary year. As the year advanced, however, prices began to rise, and by July had almost doubled. In September in some places they rose still higher, the export of food-grains to the famine-stricken parts of India being of course the principal cause. As regards prices of labour, the following figures, given by Mr. Deare, the sub-divisional officer of Jhenidah, show the extent to which they have risen throughout the district :—

				Wages per month during 1876-77.		Wages per month during 1877-78.	
				Rs. A.	Rs. A.	Rs. A.	Rs. A.
Masons	...	...	...	8 0 to	10 0	10 0 to	12 0
Carpenters	...	...	...	7 8 "	15 0	10 0 "	25 0
Thatchers	...	...	...	6 0 "	7 0	7 8 "	9 0
Day-labourers	...	...	...		5 0		8 0
Domestic servants, besides food and clothing	...	...	...	2 0		3 0 "	3 8

The average price of common rice in the Moorshedabad district during the past five years is shown below :—

Year.							Average price per rupee.
							S. c.
1873-74	...	...	...	...	...	...	15 6
1874-75	...	...	...	...	...	...	14 3
1875-76	...	...	...	...	...	...	20 1
1876-77	...	...	...	...	...	...	21 3
1877-78	...	...	...	...	...	...	15 3

The average price during the past year was, it will be seen, almost as high as during times of scarcity (1873-74 and 1874-75). This was due to the great demand for exportation.

In Dinagore, Bogra, and Darjeeling the rainfall was somewhat below the average of former years; in Julpigoree it was about 26 inches short of the average; while in Rajshahye and Pubna the fall was considerably above the average, *i.e.* about 11 inches in Rajshahye and 22 inches in Pubna. In Rungpore the rainfall was about 10 inches in excess of the average. The distribution of rain was fairly seasonable in every district except Julpigoree, so that even in those districts in which the downpour was unusually large the effects were not injurious. The weather in Julpigoree during the year appears to have been somewhat peculiar, owing to the very irregular distribution of heat and rain. Hot weather was experienced when cold might have been expected, and *vice versa*, and the rainfall was excessive when much was not required and deficient when most needed.

The year was, from an agricultural point of view, a particularly favourable one in nearly every district of the division. Except in Julpigoree the rice harvest and the outturn of jute were above the average. The extreme dryness of the season was the principal cause of the deficiency in Julpigoree.

The material condition of the people, notably of the cultivating classes, who form the bulk of the population of the division, was extremely prosperous. The harvests of 1876-77 were excellent, and the crops of the year, though perhaps in some districts less plentiful, yielded on the whole a fairly good outturn. The scarcity in Madras, Bombay, and other localities, and for a short portion of the year the opening of the Northern Bengal State Railway, stimulated and facilitated exportation, and gave a great impetus to trade. The result was that food-grains, especially rice, were exported from the division in large quantities, and high and lucrative prices were obtained. The demand, too, for such articles as jute, hemp, and linseed was well maintained, owing probably to the war in Europe. The year, therefore, for the agriculturist or producer was necessarily one of marked prosperity and material profit. The increase in litigation and mercantile transactions, as evidenced by the augmented stamp revenue and the increase in the consumption of certain excisable articles, as shown by the large excise receipts of the year, afford a strong indication of the prosperous condition and comfortable circumstances of the bulk of the people. The gradual subsidence of the strong irritation which formerly subsisted between landlord and tenant, and restoration of an amicable understanding between them, have no doubt also largely contributed to improve the situation and prospects of the peasantry. The recent struggles in some districts have taught them to know and appreciate their own strength, and their landlords to perceive and respect their rights. A spirit of self-reliance and independence has thus been generated, which is a necessary forerunner of material progress and wealth. On the other hand consumers, comprising the shop-keeping and manufacturing classes and those persons whose salaries are fixed or who make nearly fixed profits,

were not so well off as usual during the year, the rise in prices having necessarily told somewhat hardly on them.

The average prices of food-grains, especially rice, were higher throughout the division in the past than in the previous year. This was due generally not to indifferent crops, as the outturn was, as has been already noted, fairly good in most districts, but to large exportations to Madras and other parts of India where scarcity prevailed.

The wages of both skilled and unskilled labour are usually high throughout the division, and during the year under review wages in some districts rose much higher, owing no doubt to the dearness of food-grains. In Dinagopore there is always a difficulty in procuring unskilled labour. The people are mostly agricultural, tolerably well-to-do, and will only work at odd intervals, when there is no work for them in the fields. A cooly earns Rs. 6 to Rs. 8 a month for work on roads, tank-cutting, &c. Skilled labour is of inferior quality, and very dear. Labour of every description commands very high rates in Darjeeling. The following are examples:—

								Per mensem.
								Rs.
Common masons	...	...	...	...	...	...	...	15
Do. carpenters	...	...	...	...	...	...	...	16
Do. blacksmiths	...	...	...	...	...	...	...	16
Coolies	...	...	...	...	...	...	...	6
Syces	...	...	...	...	...	...	...	8

Labourers on the tea gardens are described as being very well off. Besides their regular wages, which are fixed at good rates, viz. Rs. 5 a month for a man, Rs. 4 a month for a woman, and Rs. 3 a month for a boy or girl, they frequently earn more during the tea-making season by plucking an extra quantity of leaf. Moreover, land is often granted them by their employers rent free for their own cultivation, and they are provided with house accommodation free of expense.

The rainfall in this division was above the average everywhere. The chief points worthy of note are the very large fall in July, particularly in Mymensingh, and generally the large fall from June to September. Unfortunately the rain in October was scanty, causing damage to the crops, particularly in Backergunge. There was also some damage done in Tipperah owing to early rain rendering the low lands unfit for sowing, or rotting the seed where sown; otherwise the rainfall was all that could be wished for the chief food crops.

In Eastern Bengal crops are dependent partly on rain and partly on inundation, and considerable damage was done to the *aman* crop in Backergunge, Furreedpore, and Mymensingh by the very low inundation of last year: still the crop of the division was a full average one in the division, and there was a large surplus for exportation. The cold weather crops, however, were not good on the whole.

In Backergunge there was an unusually large *aous* crop, which the ryots had cultivated to a larger extent than usual owing to the scarcity caused by the cyclone of October 1876; and when this crop was harvested, the price of food-grains fell, and all fear of actual scarcity in Dukhin Shahabazpore disappeared. It was lucky this large amount of *aous* was grown in that island, for the *amun* crop there was only about half that of an average year. Elsewhere in the district it was a moderate crop. The yield of betel-nuts was very small, but the price made up for this, it having risen from Rs. 6 to Rs. 16 a maund. A sort of blight also attacked many trees in the Perozepore sub-division.

In Mymensingh the crop was an average one. Damage was done in Attiah sub-division by the want of inundation, and in Kishoregunge by too great rainfall; but the outturn of the district as a whole was not materially affected.

Jute was a good crop, and the cold-weather crops were fair.

In Furreedpore the *aous* crop in Madareepore was not good, but in the sudder and Goalundo sub-divisions it yielded well. The *amun* crop in this district, except in Madareepore, suffered from the scanty inundation.

In Tipperah the crops in the sudder sub-division were fair, while in the Brahmunbariah sub-division, which is the chief rice-growing tract, they were excellent. Here, too, as in Backergunge, the high price of betel-nut made up for a short crop.

The ryots of the division, who constitute the bulk of the people, had a year of great prosperity. They had good crops both of rice and jute, and extraordinarily high prices. When rice is high all other articles of food also rise in price, and all agricultural produce has thus sold well. Only those who, tempted by high prices, sold more rice than they were justified in doing have at all suffered.

The way in which Backergunge has recovered from the effect of the cyclone shows clearly how well off the people are. Backergunge is pre-eminently the district of cultivators. There are few artisans, few labourers, and few resident zemindars; while almost all the actual cultivators have to a certain extent a proprietary right in the land they cultivate.

In Dacca the average price of common rice was 16 seers 10 chittacks. In Furreedpore prices were almost the same, the average being little over 15½ seers. In Mymensingh prices ranged from 26½ seers in April 1877 to 13 seers in March 1878. In Tipperah the year opened with 19½ seers for the rupee and closed with 13¾ seers. In Backergunge the average price was 12 seers 11 chittacks.

The price of food did not affect the price of labour so much as it might have been expected to do.

The rainfall in the Chittagong Division was very heavy, being 116·31 inches in the sudder station of Chittagong, 117·34 in the sub-division of Cox's Bazar, and 118·14 in Noakholly. In Chittagong the rainfall was more than was required, and some damage was done to the crops, the general outturn in the northern and central parts of the district being estimated at not more than eight annas. In the south of the district, however,

a better result was obtained, the benefits of which were to some extent neutralized by excessive exportation. A larger extent of country than usual was put under cold weather crops, including *painu aous* and cold weather rice, which are raised by irrigation. The outturn of these crops was everywhere good. The destruction of so much of the *aous* crops by water, however, led to considerable tightness of prices, and even in some parts to distress among the poorer classes.

In Noakholly, on the other hand, the rainfall was less than in the year preceding, and was spread over a longer period, the rains beginning early and lasting late. The average outturn of the crops is given at 12 annas, which represents a very fair harvest. Owing to the lateness of the rains the cold weather crops are said to have been somewhat below the average.

As to the material condition of the people, there is little doubt that in the tracts devastated by the cyclone the population has been slow in recovering. In Noakholly an impression that the fertility of the land had been destroyed by the salt water, added to the difficulty of procuring seed-grain and plough-cattle, led to a decrease in the cultivated area, and consequently in the amount of food stuff produced. As exportation still goes on prices remain high, and the lower classes are to a certain extent distressed. The same tightness exists in Chittagong, though it has, no doubt, been greatly exaggerated. It may, however, be noted that the complaints have come chiefly from the zemindars: the actual cultivating classes have not complained much.

The annexed table shows the prices of the chief articles of food during the last preceding year:—

ARTICLES.	Chittagong.		Nonkholly.	
	1876-77.	1877-78.	1876-77.	1877-78.
Rice Best sort	Rs. 2-7 to 3-4 a. md.	Rs. 5 to 6-8 a md.	Rs. 3-6 p. md.	Rs. 3 to 5 a md.
Rice { Ordinary	„ 2 to 3 „	„ 4-12 to 3-12 „	„ 2-4 „	„ 2-8 to 3-4 „
Dal. {	Kalye ... „ 1-12 to 1 „	„ 1-8 to 5 „	„ 3-8 „	„ 2-3 to 3-12 „
	Masoori. „ 3-12 to 5-4 „	„ 3 to 5 „	„ 3-8 „	„ 3-8 to 5 „
Salt ...	4 to 8 seers p. rupee.	5 to 7 srs. p. rupee.	„ 5 „	„ 5 „
Oil, mustard ...	Rs. 12 to 17 a md.	Rs. 16 to 20 a md.	„ 14 „	„ 16 to 24 „
Ghee ...	14 chs. to 1 sr. p. rupee.	12 chs. to 1 sr. p. rupee.	„ 32 to 45 a md.	„ 32 to 38 „
Vegetable ...	Rs. 12 to Rs. 2-8 a md.	Rs. 2-8 p. md.	.....	.....
Fish ...	Rs. 5 to 12 „	„ 4 to 10 p. md.	.....	.....
Milk ...	„ 2-8 to 5-12 „	„ 2-8 to 6-8 „	Rs. 2-8 a md.	Rs. 1-12 to 3 a md.

It will be seen that rice was dearer in Chittagong than in 1876-77, and the same was the case with most articles of food. This is attributed to the fact that Chittagong does not produce very largely, and that the districts upon which it depended for its supply found it more

profitable to export to Madras. In Noakholly, which is apparently, a district of surplus produce, exportation to Madras is said to have been the cause of a not very noticeable rise in prices. In some articles, however, there was a decrease, and the position of the district in respect of the price of articles of food in general may be regarded as nearly stationary.

The rates of labour are shown in the following statement:—

CLASS OF LABOUR.	Chittagong.		Noakholly.	
	1876-77.	1877-78.	1876-77.	1877-78.
1. Coolies ...	3 as. to 6 as. per day.	3 as. to 5 as. per day.	Rs. 7 per m.	Rs. 6 a month.
2. Carpenters	2 „ 10 p. to 1 Ro. „	Rs. 7-8 to Rs. 15 per m.	„ 12 to Rs. 15 „	„ 15 „
3. Blacksmiths	2 „ 10 p. to 8 as. „	„ 7-8 to „ 15 „	„ 15 „	.....
4. Dhobies ...	3 „ „ „	„ 7 to „ 15 „	„ 5 „	.....
5. Sweepers ...	3 „ to 6 as. „	„ 6 to „ 8 „	„ 5 „	.....
6. Bearers ...	4 „ to 1 Ro. „	„ 8 to „ 10 „	„ 6 „	.....
7. Common masons.	.....	.....	.....	Rs. 7-8 a month
8. Syces ...	.....	.....	.....	„ 6 „

It is, however, very often difficult to get men to work at the above rates, or indeed to work at all, unless when in absolute want; and the impossibility of procuring even passably good domestic servants at exorbitant rates of pay is one of the many annoyances which a residence in Chittagong brings upon Europeans and the higher class of native officials.

Almost throughout the Patna Division the rainfall of 1877-78 was not only scanty, but ill distributed, and the general results to the crops in each district were as follows:—

In Patna by the end of January the harvesting of rice had been completed, and in spite of the vicissitudes of the season a fair crop was obtained, while a bumper autumn crop was gathered in September. Large demands for export prevented these crops from materially lowering the prices ruling in the market. But caterpillars in February spoilt and destroyed all the pulses and damaged the poppy. In Gya the rains were deficient and unequally distributed, so that the short outturn of crops coupled with the large exportation caused by high prices ruling in other parts of India resulted in very considerable distress among the poor classes of the people. In August matters became so critical that gratuitous distribution of water was made from the incomplete distributaries of the Eastern Sone Canal; and this measure was attended with great benefit.

In Shahabad there was a failure in the rains, although the total fall of the year was 29.71. which, if distributed in the normal manner, would have been sufficient for agricultural purposes. The drought of August and September would have caused a failure in the rice crop

had it not been for the canal water, which saved it in a great part of the district.

There was a failure of the *khureef* in the north-west of the district and in some other parts not reached by the canal. The spring crop gave great promise at first, but it was afterwards sadly injured by caterpillars, which chiefly attacked gram, peas, and poppy.

In Mozufferpore the scanty rainfall up to the middle of July caused more or less anxiety in all parts as to the prospects of the autumn crops and the transplantation of the rice, and in the beginning of September both crops were in a critical condition; but subsequently rain fell, and a good harvest was secured. Heavy rain in October was favourable to the sowings of the *rubbee* or spring crop. The Mozufferpore and Hajeeepore sub-divisions did well in food crops, but Sectamurhee, in the north, fared almost as badly as in 1872-74. The year was favourable to local traders, especially grain-dealers.

In Durbhunga the weather was propitious from an agricultural point of view. The autumn crop (*bhadoi*), which suffered most, was on the whole a 10-annas crop. The rice crop was above the average in the greater part of the district, and in Tajpore sub-division, where the harvest was less favourable, a fair outturn was secured. The *rubbee* or spring crop was a full average crop over two-thirds of the district, and less than three-fourths of an average crop throughout the remainder.

In Sarun the rainfall was scanty and ill distributed; the autumn crops were consequently very indifferent, and the winter rice an almost absolute failure. Towards the end of September there was acute distress, and an abnormal emigration commenced. But spring crops were sown under somewhat favourable circumstances, though the rain was very unequal. In the Gopalgunge sub-division opium was nearly destroyed by blight, and Sewan and Chupra suffered, though not to the same extent. Prices have not become easier by the coming into the market of the new grain, but have steadily risen.

In Chumparun the year opened under favourable circumstances; the previous *bhadoi* or autumn crop had been above the average, and rice and *rubbee* had also been good and the poppy unusually fine: but the year under review was nevertheless a year of considerable hardship to the poorer classes, caused by the very great deficiency in the rainfall, and more especially by its having ceased when it was most wanted—the result being high prices and considerable scarcity. The deficiency, however, was partly counteracted by the fall in July, which was large. The consequences were felt later on in the high prices which prevailed. Indian corn, which sold at 40 seers per rupee in December 1876, was selling for 21 seers in December 1877; while rice, which in March 1876 sold for 18 and 19 seers per rupee, sold this last year at 12 or 13 seers. In November no rain fell, and very great anxiety began to be felt on account of the spring crop. The subsequent rain, however, saved the outturn and compensated to a considerable extent for the partial failure of the rice crop.

Owing to overpopulation and consequent low wages the material condition of the people in this division is very low. The wages the labourers earn are barely sufficient for their support. The late rise in the prices of food has not been met by a corresponding rise in the

wages to the agricultural labourers. As before, the poorer classes continue to live from hand to mouth, and any considerable rise in the price of food-grains is severely felt. Indebtedness is very general; and while in ordinary years they gain but little for their support, the failure of a single crop is sure to cause distress.

The following table shows the average prices at which the two standard food-grains, rice and wheat, sold in the different districts of this division during the year under report:—

Districts.	Common rice.		Wheat.	
	s.	c.	s.	c.
Patna	16	3	17	7
Gya	16	2	19	0
Shahabad	14	8	16	0
Mozufferpore	16	4	19	2
Durbhunga	14	5	16	5
Sarun	13	9	13	1
Chumparun	14	0	16	9

It will be seen that the prices were exceptionally high during the year. They remained normal, or nearly so, until about July, when they rose suddenly, with a tendency to a further rise. In ordinary years the local prices of food-grains are regulated by the outturn of the crops about to appear in the market; but during last year the reaping and harvesting of the several crops had little or no appreciable effect on the markets. This was owing to the very heavy drain on the agricultural resources of this division in order to provide for the requirements of the Madras and Bombay presidencies and the North-Western Provinces. In September last, for instance, when the prospect of the *bhadai* crops were excellent, and the new *junera* had begun to come into the market, the price of grain in the City of Patna was 25 seers, against one maund in September 1876. Common rice was selling at 13 against 19 seers in the preceding year, and wheat at 15 against 24 seers. Similarly, in January last, when the new rice was finding its way into the bazar, common rice sold at 15 seers against 24 in January 1877, maize at 19 seers against one maund, and wheat at 15 against 20 seers. In March last, when the new *rubbee* crops began to be gathered in, wheat was selling at 15½ seers against 21 in March 1877, common rice at 15½ against 21½, and maize at 19 against 35 seers.

During the year under report there were no unusual meteorological disturbances or phenomena in the Bhagulporo Division. The early months of the year were wet, and consequently the heat was not very intense. The rains did not begin till July, and the season may be said to have been a little later than usual. As compared with 1876-77, the rainfall was rather deficient, and not quite opportune; but on the whole it was nearly equal to the average except at Monghyr.

The crops on the whole were good, and the deficiencies in particular parts were more than made up by the high prices which prevailed during the year.

The average outturn in all the districts is estimated by the district officers as follows:—

Districts.	Bhadoi. Ans.	Aghani. Ans.	Rubhee. Ans.
Monghyr	16	8	9 to 10
Bhagulpore	13 to 14	10	13
Purneah	9 to 10	12	7
Maldah	12	14	12
Sonthal Pergunnahs ...	9 to 10	12	9

The mango crop was a total failure. The combination of good crops and extraordinarily high prices had different effects on the different classes of the people; or, in other words, the same causes which led to the prosperous condition of some had exactly the contrary effect for others. The cost of provisions, which have been for some time at rates equal to those of 1874, pressed heavily on artisans, men on fixed salaries and day-labourers paid in cash. Most of these men were barely able to provide themselves with the common necessities of life, although no signs of distress were apparent. On the other hand the cultivating class, who had secured splendid harvests and had an exceedingly good market for them, were unusually well off. They disposed of almost the whole of their surplus stock of grain, and with the proceeds were able to pay off the demands of the mahajuns and the zemindars, and thus to set themselves quite free. Furthermore, the progress made in collecting famine advances made by Government is a proof that money was plentiful amongst the people. On the whole, then, there may be said to have been a material improvement in the condition of the people as compared with the preceding year, the bulk of the people being agriculturists.

Food was very dear throughout the year, owing to the large exportations that were made to Madras and the North-West. The rise in price was common to all sorts of grains.

Notwithstanding the price of food, the price of labour generally has not risen appreciably, although there is some tendency towards a rise. In some of the districts the rates of the year 1877-78 were exactly equal to the rates of 1876-77.

The season was not, on the whole, a very good one in the Orissa Division. Rain fell early in April and

May, and allowed of the land being ploughed and prepared in time for cultivation. The heavy fall in July, however, caused floods in some parts of Cuttack and Balasore, and the fitful fall in October did not permit more than an average crop to be reaped anywhere in the division. In Cuttack the rainfall of the year was far below the average, but was fairly distributed. In Pooree it was deficient throughout the district, and more particularly in the tracts bordering the Chilka Lake, and the crops there were almost entirely lost. There was also a considerable loss of crops in Banchas, Athais, Matkapatna, and parts of Oldhar. Strong winds prevailed during the year, and had the effect of keeping off the rain from the coast tracts. In the interior parts of the district, Khoorda excepted, there were

good crops. In Balasore the fall of rain, though heavier than in Cuttack, was not fairly distributed.

Though the harvest of 1877-78 was not equal to that of the preceding year, yet the continued export to Madras, and the high prices ruling throughout the year, have materially benefited the cultivating classes. The labouring poor, who have no land, had, however, to undergo great hardships from the high prices.

The price of rice throughout the year was unusually high. The average rate of common rice in the town of Cuttack during the year under report was nearly double that of 1875-76, as shown below:—

	1875-76.	1876-77.	1877-78.
Average rate of rice in seers of 80, tolahs ...	25.14	22.8	14.14

There has been no material change in the wages of skilled labour, but unskilled labour has risen in cost, owing to the demand for the carriage and shipment of grain, combined with the fact that the enhanced price of food had rendered it difficult for labourers to support themselves at the former low rates. Since the close of the year the prices of rice and pulses have risen considerably.

There was a great deficiency in the rainfall of the Chota Nagpore Division compared with that of the previous year. The following table shows the rainfall of the two years:—

		1876-77.	1877-78
Manbhoom	... ..	59.27	61.29
Singbhoom	... ..	70.35	60.51
Hazareebagh	... ..	58.78	40.58
Lohardugga	... ..	67.61	53.83

The fall in Hazareebagh was 12 inches below the average yearly rainfall of the division. The distribution of the rainfall during the year was unfavourable to cultivation. In each district the rains began unusually early, and ceased almost a month too soon. In Singbhoom, Hazareebagh, and Lohardugga the result was a partial failure of the winter rice crop; while in Manbhoom the cultivators mistook the breaking of the rains for a preliminary burst, which would be succeeded by a period of hot weather, and abstained at first from sowing their high land rice. In consequence of this delay, when the rains ceased much of the crop had not come to maturity, and withered away. In Hazareebagh, but for the success of the *bhadoi* crop, on which the poorer classes of that district mainly depend, there would probably have been much distress, as the outturn of the *dhan* and *mohua* is estimated to have been only half that of an average crop, while the *rubbee* was even a greater failure. In the Lohardugga district the sub-division of Palamow suffered very severely: not only was the rainfall insufficient, but much damage was caused by heavy frosts to the *rahur* and other cold-weather crops.

Notwithstanding the high prices and the partial failure of the crops, the people were better off than was generally supposed. The

rents paid by the agricultural classes are low, while the high prices of the last two or three years, mainly due to the great demand for grain for export, must have materially benefited them, and cannot have injured any who were sufficiently provident to retain enough grain for home consumption. At the same time the opening out of tea gardens has added considerably to the local demand for labour, and the foreign demand from the labour districts of Assam, Cachar, and Sylhet, has steadily increased. In Manbhoom, moreover, the people have the railway and the Rancegunge mines very close at hand, where many of them find steady employment.

In no part of the division except Palamow does there appear to have been any rise in money wages to compensate for the dearness of food; but a large proportion of the agricultural labourers receive their hire in grain, and are therefore little affected by its price.

The following figures show the price of rice in the past two years:—

	Highest price (seers per rupee).		Lowest price (seers per rupee).		Average (seers per rupee).	
	1876-77.	1877-78.	1876-77.	1877-78.	1876-77.	1877-78.
					S. c.	S. c.
Manbhoom ...	22	17	34	29	26 10	20 14
Singbhoom ...	38	22	48	40	39 8	31 0
Hazarcebagh ...	18	13	26½	20	21 8	16 0
Lohardugga ...	26	16½	32	34	29 0	24 0

In the Palamow sub-division prices were far higher than in the sudder station of the district. Common rice was being sold at Palamow in March for 12½ seers per rupee, and Indian corn was selling 17½ seers per rupee, the price in the previous August having been a rupee for 81 seers.

Statement showing monthly variations in the retail prices of food in selected districts of Bengal from April 1877 to March 1878.

1877-78.]

THE WEATHER, CROPS, AND PRICES.

NUMBER OF SEERS OF 80 TOLAHS WEIGHT PURCHASABLE FOR A RUPEE.												
COMMON RICE.												
1877.												
1878.												
April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	
S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.
Calcutta ...	13 0	14 0	13 0	12 0	11 8	11 8	12 0	13 0	11 12	11 8	12 0	10 4
Burdwan ...	10 8	25 0	16 4	15 0	13 0	15 0	13 0	15 12	16 0	16 8	15 0	14 12
24-Pergunnahs ...	13 12	12 12	12 4	10 12	9 6	8 8	9 12	10 0	13 4	11 8	12 4	10 8
Backergunge ...	17 0	17 0	14 0	13 0	14 0	11 0	12 0	16 0	17 0	15 0	14 0	13 0
Chittagong ...	13 0	10 8	12 0	12 0	12 0	13 0	13 0	18 0	13 0	14 0	12 0	11 0
Patna ...	21 0	14 8	13 0	16 0	14 8	13 0	15 0	17 0	17 0	15 0	16 0	15 8
Durghunga ...	17 0	15 12	15 4	14 12	14 4	14 4	14 12	14 4	14 4	13 8	14 4	12 12
Bhagulpore ...	18 15	20 8	18 16	17 8	13 14	12 10	15 2	13 14	13 14	13 14	13 6	11 5
Pooree ...	18 6	15 12	15 1	15 12	11 13	11 13	13 2	11 13	11 13	15 12	11 13	10 8
Hazareebach ...	24 0	22 0	22 8	17 0	17 0	15 8	19 0	17 0	17 0	14 8	13 8	14 0

WHEAT.

S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.
Calcutta ...	13 0	13 0	13 0	13 0	14 0	11 8	13 5	13 0	13 4	12 8	11 12	11 12
Burdwan ...	18 0	17 8	14 8	14 0	13 4	12 0	13 0	15 0	12 0	11 8	16 0	11 8
24-Pergunnahs ...	.....	.....	.....	15 0	.....	8 0	.....	.....	.....	.....	.....	.....
Backergunge ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chittagong ...	11 0	11 8	8 0	7 8	9 0	8 0	7 8	3 0	9 0	10 0	8 0	7 0
Patna ...	19 0	20 0	20 0	22 0	17 8	15 0	17 5	19 0	17 0	15 0	16 0	15 8
Durghunga ...	19 8	19 8	20 0	17 8	16 8	14 4	14 8	16 8	15 8	15 4	14 12	13 0
Bhagulpore ...	18 15	17 8	17 11	15 2	14 13	12 3	13 4	13 14	13 14	12 10	13 4	13 4
Pooree ...	18 6	17 1	14 7	13 2	10 8	11 13	11 13	14 7	14 7	11 13	10 8	9 3
Hazareebach ...	23 0	19 0	20 0	19 0	17 0	15 8	17 0	17 0	15 8	13 8	12 8	11 8

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Statement showing variations in the retail prices of food in selected districts of Bengal from April 1877
to March 1878—concluded.

NUMBER OF SEERS OF 80 TOLAHS WEIGHT PURCHASABLE FOR A RUPEE.														
BARLEY.														
1877.										1878.				
April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.			
S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.
Calcutta	25 0	25 0	30 0	22 0	23 0	23 0	20 0	24 0	20 0	16 0	16 0	16 0	16 0	16 0
Burdwan	30 0	35 8	50 0	30 0	30 0	30 0	30 0	27 6	25 0	25 0	25 0	25 0	25 0	17 0
24 Pargunnahs	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Backergunge	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chittagong	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Patna	34 0	32 0	35 0	30 0	30 0	22 0	22 0	25 0	22 0	19 0	21 0	20 0	20 0	20 0
Duribunga	30 12	30 12	28 8	26 4	23 8	27 8	22 0	25 4	25 4	23 0	22 0	19 8	19 8	19 8
Bhagulpore	38 0	37 8	35 5	30 6	30 5	20 3	20 3	21 7	20 3	20 3	23 0	20 3	20 3	20 3
Pooree	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hazareebagh	.....	.....	.....	27 0	.....	.....	.....	27 0	21 0	20 0	22 0	.....	.....	18 0

MAIZE OR INDIAN CORN.

	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.	S. c.
Calcutta	22 0	22 0	25 0	22 0	23 0	23 0	16 0	24 0	18 0	10 8	10 8	.....	.....	.....
Burdwan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24 Pargunnahs	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Backergunge	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chittagong	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Patna	37 8	32 0	30 0	25 0	25 0	25 0	23 0	22 0	20 0	19 0	20 0	19 0	19 0	19 0
Duribunga	28 8	25 4	25 4	22 0	22 0	23 8	26 12	24 0	22 0	18 8	20 12	18 8	18 8	18 8
Bhagulpore	50 9	.....	.....	.....	31 9	22 11	25 4	23 0	21 7	17 11	17 11	17 11	17 11	17 11
Pooree	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hazareebagh	30 0	.....	.....	25 0	.....	30 0	27 0	24 0	20 0	17 0	16 0	16 4	16 4	16 4

Statement showing Seasonal Rainfall for

1	2	3	4	5	6	7	8	9
NAMES OF DIVISIONS AND DISTRICTS.	Names of stations.	Number of years the total rainfall whereof is taken for the average fall per annum.	REGISTERED RAINFALL IN INCHES AT					
			Fall to end of April (4 months).		Fall to end of June (6 months).		Fall to end of August (8 months).	
			Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.
<i>Burdwan Division.</i>		Years.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Burdwan	Burdwan ...	16-18	5.85	5.91	21.60	21.61	45.74	46.53
	Cutwa ...	7-8	5.23	7.11	21.70	18.32	43.69	45.78
	Cahna ...	7-8	5.19	9.69	17.91	21.06	40.57	40.61
	Bood-Bood ...	7-8	3.97	4.34	16.08	13.73	39.25	41.91
	Rauegunge ...	8	3.24	2.80	13.00	14.27	38.34	41.02
Bankoora	Jehanabad ...	6-7	5.37	6.87	20.64	17.48	45.90	51.30
Bankoora	Bankoora ...	18-20	4.77	7.81	17.76	21.24	41.17	43.13
	Soory ...	14-16	3.18	3.23	14.89	21.82	40.84	47.81
Beerbhoom	Hetanpore ...	3	4.84	2.80	25.81	17.59	51.63	45.44
	Mulnapore ...	12-14	4.88	3.53	21.03	9.55	43.54	34.20
Midnapore	Tumlook ...	7	7.12	4.16	21.90	17.82	45.98	39.74
	Contai ...	0-11	4.85	3.56	20.42	9.89	47.53	32.38
Hooghly	Hooghly ...	13	7.86	5.65	23.64	30.23	47.07	63.63
	Serampore ...	6-7	6.04	5.58	18.97	22.68	42.39	52.24
Howrah	Howrah ...	9-10	7.47	5.91	23.42	23.31	50.02	45.65
<i>Presidency Division.</i>								
24 Pargunnahs	Sauzer Island ...	10-11	3.97	2.18	21.62	7.31	50.50	31.63
	Alipore (Jail) ...	7-8	6.76	7.40	21.81	25.89	49.82	48.39
	Busserhat ...	7-8	5.82	5.90	18.57	22.11	42.44	63.50
	Baraset ...	7-8	5.89	2.82	20.76	25.90	43.04	51.49
	Diamond Harbour ...	7-8	6.68	6.64	22.55	19.63	50.89	44.30
Calcutta	Barrpore ...	7-8	4.95	5.35	21.11	19.46	50.25	50.98
	Sarkhin ...	7-8	8.88	9.90	25.61	27.26	49.11	68.00
	Barknapore ...	7-8	6.09	5.20	21.38	22.14	42.33	51.46
	Dum-Dum ...	7-8	5.86	7.21	20.35	24.02	44.63	48.27
	...	48-49	5.12	5.08	22.43	24.86	49.25	47.29
Nuddea	Rishmehur ...	14-17	5.31	8.75	23.07	19.19	44.34	49.78
	Bongou ...	8	5.91	11.11	21.49	25.32	47.22	48.00
	Meherpore ...	7-8	6.19	5.70	22.11	16.62	55.83	39.34
	Choochangah ...	7-8	6.11	8.66	24.14	25.04	46.43	53.20
	Kooshtia ...	8	6.37	8.66	23.18	25.14	47.43	55.19
Jessore	Banglat ...	7-8	7.34	13.77	21.80	30.34	41.52	58.24
	Jessore ...	10-19	7.17	14.00	24.72	20.92	50.05	55.63
	Narail ...	6-8	7.53	9.80	27.23	28.55	53.46	39.48
	Khalchha ...	6-7	8.28	7.75	28.76	20.92	54.48	51.45
	Jhorhat ...	6-7	7.81	12.91	29.12	25.08	51.96	44.90
Moorshedabad	Bazrat ...	6-7	8.21	5.75	30.00	23.85	57.07	55.94
	Mogora ...	6-7	7.91	10.40	26.30	24.58	47.68	51.33
	Berhanpore ...	20-22	4.73	2.43	18.32	19.68	53.90	45.62
	Rampore Hank ...	5	4.10	6.50	15.74	18.95	38.85	56.87
	City Moorshedabad ...	7	3.91	2.90	17.41	17.95	41.48	37.48
Rajshahye and Cooch Behar Division.	Jungypore ...	7	4.32	3.34	17.63	17.18	41.99	40.99
	Azimungo ...	5-6	4.57	2.82	16.26	17.62	40.63	42.06
	Lalgolla ...	4-5	4.88	2.18	17.40	14.52	41.30	38.60
Dinagopora	Dinagopora ...	16-18	3.98	4.22	29.68	27.37	58.31	60.53
Rajshahye	Bauleah ...	16-18	4.80	2.61	20.98	19.08	44.40	53.53
	Nattoro ...	7-8	5.42	2.29	21.24	22.22	46.35	56.45
Rangpore	Rangpore ...	16-18	4.77	5.96	35.93	37.93	63.73	99.19
	Bhalaungunge ...	7	4.68	7.20	25.92	40.64	47.62	79.37
Bogra	Bogra ...	11-17	6.70	3.97	31.43	22.58	61.43	66.12
Pabna	Pabna ...	11-12	8.24	5.35	28.25	25.38	63.36	57.54
	Serajungo ...	7-8	5.98	7.99	23.69	25.13	47.23	43.64

each Sub-Division in Bengal during 1878.

10	11	12	13	14	15	16	17	18	19	20	21
ALL THE STATIONS NAMED IN COLUMN 2.											
Fall in September (1 month).		Fall to end of Sep- tember (9 months).		Fall in October (1 month).		Fall to end of October (10 months).		Fall after October and to end of Decem- ber (2 months).		Total fall of the year 1878.	
Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.
Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
8.07	10.33	53.71	56.86	5.17	.....	58.88	.....	0.84	.....	59.72	.....
7.72	18.90	51.11	61.08	3.61	.....	53.02	.....	0.11	.....	55.13	.....
4.96	13.60	45.53	60.11	4.11	.....	39.64	.....	0.32	.....	49.96	.....
7.85	5.55	47.10	51.59	4.07	.....	51.17	.....	0.34	.....	51.51	.....
6.69	9.95	45.53	46.97	3.18	.....	48.51	.....	0.26	.....	48.77	.....
11.18	14.51	57.08	69.11	5.75	.....	62.84	.....	0.09	.....	62.93	.....
8.77	8.57	49.94	51.70	5.29	.....	55.14	.....	0.47	.....	55.61	.....
9.38	13.09	50.42	60.93	3.98	.....	54.40	.....	0.28	.....	54.68	.....
11.15	23.53	65.78	68.07	2.88	.....	68.16	.....	0.24	.....	68.40	.....
8.22	9.93	51.78	44.13	6.26	.....	58.02	.....	0.70	.....	58.72	.....
7.57	11.62	53.55	51.26	5.40	.....	58.95	.....	0.19	.....	59.14	.....
12.43	11.90	59.06	44.28	11.24	.....	71.29	.....	1.55	.....	72.85	.....
7.63	18.12	55.09	81.15	3.94	.....	59.54	.....	0.52	.....	60.16	.....
6.14	20.70	48.83	73.94	5.61	.....	54.44	.....	0.15	.....	54.59	.....
9.66	11.67	59.68	56.72	4.85	.....	61.53	.....	0.12	.....	61.65	.....
12.39	9.52	62.89	41.15	10.39	.....	73.28	.....	0.65	.....	73.93	.....
9.06	12.93	58.88	61.52	5.67	.....	64.55	.....	0.34	.....	64.89	.....
7.88	8.60	50.32	62.05	3.54	.....	53.88	.....	0.51	.....	54.39	.....
7.22	19.70	56.26	71.19	5.06	.....	55.26	.....	0.17	.....	55.43	.....
10.84	12.32	61.73	56.71	6.50	.....	68.23	.....	0.45	.....	68.68	.....
9.22	8.04	59.47	59.02	6.52	.....	65.99	.....	1.20	.....	67.29	.....
8.07	11.27	57.18	69.27	4.16	.....	61.64	.....	0.86	.....	62.50	.....
5.93	21.08	48.26	72.54	4.17	.....	62.43	.....	1.00	.....	63.43	.....
8.26	16.25	52.95	64.52	4.98	.....	57.95	.....	0.30	.....	58.25	.....
10.15	10.14	59.40	57.43	5.54	.....	64.94	.....	0.91	.....	65.85	.....
6.78	9.19	51.12	58.97	4.50	.....	55.42	.....	0.44	.....	55.86	.....
5.50	14.57	52.72	63.17	4.63	.....	57.35	.....	0.55	.....	57.90	.....
6.53	12.03	62.36	51.27	3.05	.....	65.41	.....	0.40	.....	65.81	.....
8.92	21.97	55.35	75.17	3.12	.....	58.77	.....	0.13	.....	58.90	.....
9.16	15.74	56.59	70.93	3.17	.....	60.76	.....	0.31	.....	61.07	.....
5.74	15.06	47.26	73.59	3.34	.....	50.00	.....	0.33	.....	50.33	.....
8.73	11.22	58.78	69.25	5.58	.....	64.36	.....	0.80	.....	65.16	.....
7.29	8.08	60.75	48.16	3.51	.....	63.26	.....	0.41	.....	63.67	.....
8.85	7.73	63.33	80.18	3.79	.....	67.12	.....	0.56	.....	67.68	.....
7.74	15.23	62.10	60.19	4.94	.....	67.04	.....	0.22	.....	67.26	.....
8.38	8.90	65.45	64.84	3.69	.....	69.14	.....	1.00	.....	70.14	.....
7.68	16.79	55.26	68.12	3.64	.....	58.90	.....	0.32	.....	59.22	.....
9.61	19.06	48.71	61.62	5.47	.....	54.18	.....	0.25	.....	54.43	.....
11.78	9.21	59.63	60.68	4.29	.....	53.02	.....	0.06	.....	53.08	.....
10.01	13.24	51.49	50.72	3.69	.....	55.18	.....	0.08	.....	55.26	.....
10.42	10.97	52.41	51.96	4.05	.....	56.46	.....	0.16	.....	56.62	.....
7.72	12.67	48.35	54.73	5.83	.....	54.18	.....	0.16	.....	54.34	.....
10.29	12.65	51.59	52.25	5.50	.....	57.09	.....	0.36	.....	57.45	.....
12.86	7.88	71.17	69.71	6.10	.....	77.27	.....	0.17	.....	77.44	.....
10.92	15.19	55.32	68.72	5.00	.....	60.41	.....	0.29	.....	60.70	.....
11.53	19.92	57.88	76.37	4.46	.....	62.34	.....	0.08	.....	62.42	.....
11.43	19.61	77.16	118.80	5.30	.....	83.40	.....	0.36	.....	83.76	.....
12.12	11.38	59.64	90.70	5.15	.....	64.79	.....	0.25	.....	65.04	.....
13.87	10.75	75.30	76.87	5.11	.....	86.11	.....	1.17	.....	87.28	.....
11.77	15.35	65.13	72.89	4.62	.....	69.03	.....	0.18	.....	69.21	.....
9.99	11.14	57.22	54.78	3.63	.....	60.85	.....	0.50	.....	61.35	.....

Statement showing Seasonal Rainfall for

1	2	3	4	5	6	7	8	9
NAMES OF DIVISIONS AND DISTRICTS.	Name of Stations.	Number of years the total rainfall whereof is taken for the average fall per annum.	REGISTERED RAINFALL IN INCHES AT					
			Fall to end of April (4 months).		Fall to end of June (6 months).		Fall to end of August (8 months).	
			Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.
<i>Rajshahye and Cooch Behar Division—concluded.</i>			Years.	Inches.	Inches.	Inches.	Inches.	Inches.
Darjeeling	Darjeeling	14-17	7.28	7.54	39.79	33.35	94.57	90.94
Julpigoree	Julpigoree	8.9	6.83	6.19	45.61	46.72	92.20	110.75
	Ruxa	8-9	12.12	11.29	78.34	75.54	172.64	174.61
	Bodah	7.8	4.47	5.21	31.88	30.69	64.32	91.97
Cooch Behar Tributary States	Titalya	7-8	5.89	3.05	35.75	41.61	80.40	94.87
	Cooch Behar	6-7	8.53	7.77	63.14	87.84	94.81	118.79
<i>Dacca Division.</i>								
Dacca	Dacca	25-26	9.92	8.05	32.35	22.90	56.56	58.07
	Moonshceergunge	5-6	11.29	6.48	34.84	33.08	65.12	70.73
Furcedpore	Manickgunge	5-6	6.72	6.02	25.83	14.35	49.70	49.34
	Furcedpore	9	9.13	11.71	31.67	24.35	58.66	50.64
	Gondondo	6-7	7.19	4.96	24.90	23.73	49.32	60.60
Backergunge	Madarcepore	7-8	9.12	13.50	33.30	30.73	60.65	57.75
	Burrisal	9.10	8.16	4.51	30.18	21.43	59.87	53.12
	Perozepore	7-8	6.40	4.57	28.02	26.02	58.28	61.00
Mymensingh	Patoekhalhy	5-6	8.38	3.49	37.97	23.35	81.91	64.73
	Mymensingh	13-14	9.73	10.42	43.97	32.00	77.47	66.26
	Jamshapore	7-8	6.10	6.81	29.63	37.03	57.73	73.79
Tipperah	Attia	7-8	7.33	6.26	31.76	21.39	56.14	45.35
	Kishoregunge	7-8	9.53	9.94	39.88	34.49	60.39	58.62
	Comillah	17-18	11.69	9.75	41.19	37.12	74.23	65.98
	Brahmanbarah	7-8	11.71	10.12	37.55	28.84	63.09	53.43
<i>Chittagong Division.</i>								
Chittagong	Chittagong	18-20	7.95	5.20	39.25	30.46	75.07	74.40
	Cox's Bazar	7-8	5.73	4.32	49.93	39.92	110.63	87.30
Noakholly	Noakholly	19-21	7.61	6.05	39.64	31.47	81.45	75.07
Chittagong Hill Tracts	Rangamatee Hill	9	8.61	8.94	35.57	29.66	75.42	67.32
	Hill Tipperah	5-6	11.91	10.08	35.53	33.45	64.06	56.87
<i>Patna Division.</i>								
Patna	Patna	18-20	1.76	1.81	9.85	6.78	27.91	35.98
	Behar	7-8	1.97	1.14	9.84	9.15	33.86	32.25
	Barh	7-8	1.70	1.44	8.71	8.65	28.75	37.89
Gya	Dinapore	7-8	1.40	2.27	9.57	6.33	29.02	31.98
	Gya	14-16	2.26	2.14	9.89	11.90	31.21	31.50
	Nowada	7-8	1.92	2.31	10.80	10.02	35.21	32.07
Shahabad	Ahmednabad	6-8	1.76	2.15	8.64	8.41	33.13	27.17
	Jehanabad	5	1.84	2.11	7.59	9.61	30.33	37.16
	Arrah	19-22	2.55	2.48	11.18	9.87	33.69	31.72
Mozufferpore	Sassaram	7-8	1.48	1.51	8.13	8.62	33.58	29.91
	Buxar	9.10	1.82	3.38	7.97	7.99	29.42	21.64
	Bhambhore	7-8	2.43	3.21	9.44	8.11	36.58	20.61
Durbhunga	Mozufferpore	17-19	2.40	2.45	10.56	12.58	30.40	28.84
	Hujerpore	6-7	1.97	1.43	10.68	4.21	31.74	26.23
	Sectanurho	7	3.29	4.40	13.67	14.60	32.36	36.74
Durbhunga	Durbhunga	7	2.11	1.45	10.50	12.80	33.07	30.60
	Madhubanice	6-7	3.84	2.03	12.30	13.93	31.44	34.89
	Tajpore	7	2.27	0.41	10.46	12.41	29.04	38.07

Sub-Division in Bengal during 1878—continued.

10	11	12	13	14	15	16	17	18	19	20	21
ALL THE STATIONS NAMED IN COLUMN 2.											
Fall in September (1 month).		Fall to end of September (9 months).		Fall in October (1 month).		Fall to end of October (10 months).		Fall after October and to end of December (2 months).		Total fall of the year 1878.	
Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.
Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
16.09	23.19	111.50	114.13	7.34	.....	118.90	.....	0.35	.....	119.25	.....
24.29	31.38	116.19	122.13	5.62	.....	122.11	.....	0.05	.....	122.16	.....
34.34	31.27	206.93	205.88	10.46	.....	217.44	.....	1.01	.....	218.45	.....
18.35	27.45	82.67	119.12	6.26	.....	88.93	.....	0.11	.....	104.04	.....
19.96	30.85	100.36	125.72	4.46	.....	104.82	.....	0.02	.....	104.84	.....
19.48	44.97	114.29	193.76	4.71	.....	119.00	.....	0.05	.....	119.05	.....
9.56	15.31	66.12	73.38	5.44	.....	71.56	.....	0.90	.....	72.46	.....
11.32	10.85	76.44	81.58	3.41	.....	79.85	.....	1.36	.....	81.21	.....
8.42	13.54	58.12	62.88	2.86	.....	60.38	.....	0.35	.....	61.33	.....
10.66	8.49	69.32	59.17	3.83	.....	73.15	.....	0.28	.....	73.43	.....
9.00	10.81	58.32	71.41	4.02	.....	62.34	.....	0.29	.....	62.63	.....
9.52	6.38	70.17	54.13	4.77	.....	74.94	.....	0.63	.....	76.57	.....
10.50	8.15	70.37	61.27	4.13	.....	74.50	.....	0.99	.....	75.49	.....
10.20	10.00	68.48	71.00	4.54	.....	73.02	.....	0.95	.....	73.97	.....
12.64	4.15	94.55	68.88	6.37	.....	100.92	.....	2.08	.....	103.00	.....
13.59	29.38	91.06	95.54	5.07	.....	96.13	.....	0.82	.....	96.95	.....
14.17	20.59	71.90	64.38	3.83	.....	75.73	.....	0.34	.....	76.07	.....
11.91	18.10	68.05	63.45	4.78	.....	72.85	.....	0.14	.....	73.07	.....
14.82	21.22	84.21	70.84	5.93	.....	90.13	.....	0.71	.....	90.84	.....
10.18	13.41	84.41	79.41	5.84	.....	90.25	.....	1.73	.....	91.98	.....
10.65	12.79	73.74	66.22	4.80	.....	78.54	.....	0.61	.....	79.05	.....
13.39	16.19	88.46	96.59	6.09	.....	94.55	.....	2.00	.....	96.55	.....
15.99	15.05	126.62	102.35	8.01	.....	134.63	.....	1.65	.....	136.28	.....
16.46	18.60	97.91	94.27	7.85	.....	105.76	.....	1.76	.....	107.52	.....
13.19	15.63	88.61	82.95	7.41	.....	96.02	.....	1.35	.....	97.37	.....
8.32	12.83	72.38	69.70	4.06	.....	76.44	.....	1.35	.....	77.79	.....
7.20	3.87	35.11	39.85	2.70	.....	37.90	.....	0.31	.....	38.21	.....
6.19	5.00	40.05	37.25	3.18	.....	43.23	.....	0.12	.....	43.35	.....
8.23	4.94	36.98	42.83	3.49	.....	40.47	.....	0.05	.....	40.52	.....
7.77	5.70	36.79	37.08	2.99	.....	39.78	.....	0.18	.....	39.96	.....
7.21	9.30	38.42	40.80	2.85	.....	41.27	.....	0.11	.....	41.38	.....
7.56	7.35	42.77	39.42	2.37	.....	45.14	.....	0.29	.....	45.42	.....
6.07	4.91	39.20	31.18	2.15	.....	41.35	.....	0.31	.....	41.66	.....
4.12	2.79	31.45	39.95	2.20	.....	36.65	.....	0.12	.....	36.77	.....
9.18	5.63	42.87	37.35	2.65	.....	45.52	.....	0.25	.....	45.77	.....
5.89	4.30	39.47	34.21	3.60	.....	43.07	.....	0.15	.....	43.22	.....
7.64	3.12	37.06	24.70	3.22	.....	40.28	.....	0.21	.....	40.49	.....
7.38	6.94	43.96	32.05	2.64	.....	46.60	.....	0.36	.....	46.96	.....
8.05	5.55	39.65	34.19	3.45	.....	42.50	.....	0.07	.....	42.57	.....
9.40	3.55	41.14	29.83	4.34	.....	45.44	.....	0.12	.....	45.60	.....
9.39	7.19	41.75	43.93	2.28	.....	44.03	.....	0.11	.....	44.14	.....
16.46	3.41	44.43	34.01	2.71	.....	47.14	.....	0.20	.....	47.34	.....
11.80	7.33	43.24	42.22	2.33	.....	45.37	.....	0.06	.....	45.43	.....
8.32	8.64	37.36	46.81	2.14	.....	39.59	.....	0.02	.....	39.52	.....

Statement showing Seasonal Rainfall.

1	2	3	4	5	6	7	8	9
NAMES OF DIVISIONS AND DISTRICTS.	Names of stations.	Number of years the total rainfall whereof is taken for the average fall per annum.	REGISTERED RAINFALL IN INCHES					
			Fall to end of April (4 months).		Fall to end of June (6 months).		Fall to end of August (8 months).	
			Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.
<i>Patna Division -- concluded.</i>			Years.	Inches.	Inches.	Inches.	Inches.	Inches.
Sarun	Chupra	19-22	2-21	1-62	9-51	5-60	27-54	22-5
	Sewan	7-8	2-17	2-91	12-73	5-20	34-17	23-1
Chumpanun	Motiharee	11-15	2-31	2-73	12-66	7-70	33-73	31-6
	Bettiah	6-7	3-21	2-41	14-80	7-57	37-85	29-7
<i>Bhagulpore Division.</i>								
Monghyr	Monghyr	21-23	1-95	1-36	10-01	8-52	31-84	39-1
	Begoo Serai	7-8	1-94	2-51	8-19	10-29	28-98	32-3
Bhagulpore	Jamooce	7-8	3-15	1-72	11-94	9-38	35-30	32-9
	Bhagulpore	21-22	2-62	3-81	13-19	14-87	35-19	10-2
Bhagulpore	Soojpool	6-7	2-19	0-50	11-62	9-24	35-15	35-9
	Muddehpoora	7-8	2-87	2-20	12-57	12-19	36-35	45-2
Purneah	Banka	7-8	2-45	3-05	13-54	14-44	34-20	51-0
	Sonbursa	5	2-19	1-10	11-23	11-34	33-06	46-3
Maldah	Purneah	7-8	3-11	3-49	17-39	20-18	45-39	47-3
	Kishenmunge	6-7	2-76	3-95	22-78	19-15	53-97	65-7
Sonthal Pergunnahs...	Arrarah	5-7	3-01	6-56	20-31	26-08	47-69	62-2
	Maldah	20-22	4-12	3-97	16-84	17-81	36-96	44-0
Sonthal Pergunnahs...	Nya Broomka	7	3-78	2-30	17-12	9-66	44-59	42-1
	Deoghur	8-9	3-13	3-07	13-39	14-17	37-29	49-2
Sonthal Pergunnahs...	Rajmehal	6-8	2-16	5-25	14-89	36-15	34-80	88-3
	Goddah	5-6	2-27	1-42	11-96	16-95	32-16	64-8
<i>ORISSA.</i>								
<i>Orissa Division.</i>								
Cuttack	Cuttack	17-20	3-60	1-98	15-90	16-57	38-18	40-0
	Jajpore	7	4-97	0-80	19-34	9-90	43-07	20-10
Pooree	Kendrapara	7	3-79	1-70	15-65	11-20	39-41	27-9
	Jagatsingapore	6-7	3-27	0-70	14-17	8-80	32-83	41-7
Balasore	False Point	11	6-57	1-69	20-12	10-31	49-81	27-1
	Pooree	19-21	3-31	0-18	13-61	3-73	34-53	20-1
Chandbally	Khoordah	7-8	3-56	0-91	17-53	9-03	43-16	30-8
	Balasore	16-18	6-52	7-01	21-33	16-39	45-21	41-2
Chandbally	Blundruick	7-8	4-71	4-33	17-08	12-19	38-30	46-6
	Jellasore	4-5	5-68	6-15	15-93	15-21	48-62	40-2
Chandbally	Sora	4-5	4-77	5-30	14-96	16-62	41-56	45-9
	Chandbally	4-5	3-97	3-57	13-23	18-25	38-68	40-7
<i>CHOTA NAGPORE.</i>								
<i>CHOTA NAGPORE DIVISION.</i>								
<i>South-West Frontier Agency.</i>								
Hazarceebagh	Hazarceebagh	16	2-41	2-69	12-02	8-55	37-24	34-0
	Pachumla	7-8	5-21	1-81	13-88	9-90	38-94	42-3
Lohardugga	Ranchee	20-22	4-17	6-16	13-36	14-04	39-20	35-2
	Palamow	7-8	2-54	2-04	11-20	5-97	36-56	28-57
Singbhoom	Chykeassa	8-9	4-69	5-19	16-81	15-15	43-22	49-6
	Purdeah	13-15	3-06	7-67	13-98	20-57	36-85	44-0
Maunbhoom	Goswampore	6-7	3-71	2-74	14-25	13-31	42-34	43-3

Sub-Division in Bengal during 1878—concluded.

10	11	12	13	14	15	16	17	18	19	20	21
THE STATIONS NAMED IN COLUMN 2.											
in September (1 month).	Fall to end of Sep- tember (9 months).	Fall in October (1 month).	Fall to end of Octo- ber (10 months).	Fall after October and to end of Decem- ber (2 months).	Total fall of the year 1878.						
average years per ann 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.	Average of years as per column 3.	Fall in 1878.
ches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
6.51	5.56	34.35	28.10	2.65	.....	37.00	.....	0.06	.....	37.06	.....
6.53	9.36	41.00	32.52	4.00	.....	45.00	.....	0.11	.....	45.11	.....
8.04	5.32	41.77	39.92	3.26	.....	45.03	.....	0.14	.....	45.17	.....
11.45	5.42	49.30	35.14	1.71	.....	51.01	.....	0.11	.....	51.12	.....
7.92	6.39	39.76	45.52	3.60	.....	43.36	.....	0.14	.....	43.50	.....
7.04	4.37	36.02	36.76	3.54	.....	39.56	.....	0.07	.....	39.63	.....
8.35	9.08	43.65	42.00	2.23	.....	45.88	.....	0.07	.....	45.95	.....
7.77	5.98	43.26	45.97	4.66	.....	47.92	.....	0.12	.....	48.04	.....
10.03	17.43	45.18	53.10	2.16	.....	47.34	.....	0.13	.....	47.47	.....
0.86	14.00	47.21	60.14	4.67	.....	51.88	.....	0.09	.....	51.97	.....
9.33	6.27	43.53	60.34	3.59	.....	47.12	.....	0.19	.....	47.31	.....
11.10	8.59	44.16	54.93	2.66	.....	46.82	.....	0.01	.....	46.83	.....
11.60	16.10	56.09	63.12	3.51	.....	60.50	.....	0.07	.....	60.57	.....
13.38	18.21	67.35	83.90	2.50	.....	69.85	.....	0.15	.....	70.00	.....
11.00	18.29	61.69	80.57	2.91	.....	64.60	.....	0.04	.....	64.64	.....
11.40	7.98	48.36	52.65	4.17	.....	52.83	.....	0.57	.....	53.40	.....
9.96	13.15	54.55	55.25	3.34	.....	57.89	.....	0.50	.....	58.39	.....
9.23	12.23	46.52	61.49	5.90	.....	52.42	.....	0.23	.....	52.65	.....
13.00	9.24	47.80	57.55	2.78	.....	56.58	.....	0.27	.....	56.85	.....
9.41	10.11	41.57	64.60	2.52	.....	44.09	.....	0.15	.....	44.24	.....
9.19	6.40	47.97	46.11	6.31	.....	54.28	.....	1.40	.....	55.68	.....
9.20	.....	52.27	.....	7.17	.....	59.74	.....	0.63	.....	60.37	.....
8.17	12.50	47.58	40.20	6.42	.....	54.40	.....	0.63	.....	54.63	.....
7.16	10.53	39.99	52.23	7.38	.....	47.37	.....	1.23	.....	48.60	.....
10.94	12.67	60.75	39.82	12.60	.....	73.41	.....	2.95	.....	76.36	.....
9.16	13.56	43.69	33.66	8.26	.....	51.95	.....	2.43	.....	54.38	.....
10.27	7.41	53.73	38.26	7.86	.....	61.59	.....	1.53	.....	63.12	.....
12.68	7.90	57.89	49.18	7.33	.....	56.22	.....	0.79	.....	60.01	.....
8.99	9.18	47.29	55.80	4.13	.....	51.42	.....	0.94	.....	52.36	.....
9.01	9.86	57.53	50.11	6.70	.....	64.23	.....	0.17	.....	64.40	.....
11.02	7.30	52.58	53.20	4.92	.....	57.50	.....	0.54	.....	58.04	.....
7.39	7.96	46.07	48.73	6.31	.....	52.38	.....	0.58	.....	52.96	.....
7.11	7.15	44.85	41.15	5.43	.....	47.78	.....	0.38	.....	48.16	.....
8.35	8.42	46.39	50.74	7.22	.....	49.61	.....	0.24	.....	49.85	.....
7.79	10.50	43.90	45.73	5.31	.....	47.30	.....	0.27	.....	47.57	.....
8.79	5.99	45.34	34.56	2.60	.....	47.94	.....	0.39	.....	48.33	.....
8.08	6.46	52.20	56.26	3.85	.....	56.05	.....	0.28	.....	56.33	.....
7.11	13.93	43.96	57.99	4.26	.....	48.22	.....	0.25	.....	48.47	.....
7.77	6.17	50.11	49.49	3.87	.....	53.98	.....	0.16	.....	54.14	.....

Agriculture and Horticulture.

THE improvements made during the past four years in the eastern portion of the Royal Botanical Garden are now beginning to produce effect, and its appearance is gradually improving. These improvements consisted in enlarging, connecting, and altering the form of the numerous scattered pieces of water, in collecting into groups such trees as were not too large to be transplanted, in undulating the soil, in altering old roads and aligning new ones, in planting avenues, and, in short, in treating the grounds with a view to good landscape effects. At the same time a great deal has been done to improve cultivation and drainage. The western portion of the Garden must, however, receive much care and attention before its condition can be considered satisfactory. A long, winding piece of water runs through this part of the Garden, and preliminary arrangements have been made for deepening it and throwing the earth thus obtained into slopes and undulations. It is hoped that this portion of the Garden may afterwards be laid out as a park. The success of the recently-built iron plant-houses has been gratifying; the species planted in the older house presenting masses of dense and healthy foliage, while the orchids have grown and flowered well.

The general improvement in the Garden of late years has on the whole been very marked.

Considerable additions have been made to the herbarium during the year. The chief of these is the collection of the late Mr. S. Kurz, who, prior to his death, presented the whole of his dried plants to the Garden. Mr. Kurz's herbarium comprises specimens from all parts of India, but is especially rich in Burmese, Andamanese, and Bengal plants. It contains, also, a number of Malayan species and a good many European plants. Altogether, it forms a great and useful addition to the Government collection. A very interesting collection of plants, made at the Cape of Good Hope in 1797 by the late Dr. Roxburgh, has been presented by his surviving daughter. Dr. Roxburgh, who is justly named the father of Indian botany, was for

a long period the Superintendent of this Garden; but, until the receipt of his daughter's gift, the Garden herbarium did not contain a single authentic specimen of his collecting. Dr. J. Scully has contributed a valuable series of plants from Nepal—the only collection received from that country since Dr. Wallich's expedition there, nearly 60 years ago. Dr. O. T. Duke has presented an interesting set of Beluchistan plants, collected near Khelat and Quetta. Colonel Beddome has contributed a considerable number of rare plants from the south of India, as well as 64 species of Nilghiri mosses. To Mr. J. Sykes Gamble, of the Forest Department, the herbarium is indebted for a fine set of Simla plants, comprising about 500 species, and also for a number of Sikkim plants. Mr. J. F. Duthie, Superintendent of the Saharunpore Botanic Garden, has given about 150 specimens of plants of the North-West Himalaya; and Mr. J. Ware-Edgar, c.s.i., late Deputy Commissioner of Darjeeling, contributed about 20 species, collected by natives in the Chumbi Valley. A considerable number of dried plants have been sent by the Garden Collectors from Tenasserim and the interior of Sikkim.

The building in which the herbarium and library are placed is not suited for the purpose, and the accommodation which it affords is not sufficient. The necessity for enlarging the building was admitted in 1876, but the want of funds has hitherto prevented this necessary improvement being carried out. Arrangements have, however, now been made to secure the enlargement and improvement of this building.

The total number of seed-packets issued during the year amounts to 5,142, while 2,432 were received. Of living plants 18,510 have been issued and 10,177 have been received. The contributors to whom the Garden is chiefly indebted are Sir Joseph Hooker, of the Royal Garden, Kew; Dr. Thwaites, F.R.S., C.M.G., Ceylon; Sir W. Macarthur, Sydney, who has from time to time presented magnificent collections of new crotons; Major Badgeley, Shillong; and Mr. Man, Port Blair, an indefatigable contributor of Andamanese plants, to whom the Garden is specially indebted.

The Garden, however, has sustained by the death of Mr. Sulpiz Kurz a loss which is almost irreparable. Mr. Kurz was a native of Munich, and after spending some years in Java was appointed Curator of the Herbarium attached to the Royal Botanical Garden in 1864. He was indefatigable in work, and numerous published papers attest his industry and scientific ability. Mr. Kurz went on leave in November last, and proceeded on a coasting tour to Burmah and the Straits for the benefit of his health. He died at Penang on 9th February of fever. His last work was a Forest Flora of British Burmah.

Mention was made in last year's report of the measures which had been taken for the formation of a botanical garden at Rungaroon, in the Darjeeling district.

This project is about to be abandoned, and in its place a branch botanical garden will be established at Darjeeling. The reasons which led to this change are the unsuitableness of the Rungaroon climate and soil for a botanical garden, and the better prospects of success in Darjeeling, more especially in connection with the proposal of the Home Government to grow in India as many as possible of the

drugs used in medicine and now imported from England at great expense. The Darjeeling branch botanical garden will be established on a piece of land lying between the municipal garden and the jail, which has lately been made over to Government as a free gift by Mr. Lloyd, of Darjeeling. Actual work will not begin in the new garden till October 1878, but in the meantime the propagation of plants for it will be carried on at Rungaroon under trained superintendence. The preliminary cost of laying out the garden and the charges for maintaining it for six months from 1st October 1878 are estimated at Rs. 18,700 : thus—

<i>Initial outlay.</i>		<i>Maintenance for six months.</i>	
	Rs.		Rs.
Enlarging the house for Resident Gardener, &c.	2,500	Head Gardener at Rs. 300	1,800
Road to connect garden with mall	1,000	Plant collectors	... 150
Fencing conservatory and propagatory houses	... 19,250	Purchase of plants and seed	... 500
		Coolie and malce labour	... 1,500
		Tools, &c.	... 1,000
Total	... 13,750	Total	4,950

Of the Para rubber seedlings received in the beginning of 1877 a portion was retained in the Royal Botanical Garden, and some were sent to the Cinchona Plantation in Sikkim. Several of these plants have died during the year. The plants that still remain in the Botanical Garden (14 in number) are, however, healthy, and have grown fairly well. Every care is being taken of them, and it is hoped that they may soon be increased in number by artificial propagation. Former experience has led to the conclusion that it is not safe to allow cuttings to be made until the parent plants have had plenty of time thoroughly to establish themselves. A quantity of Ceara rubber plants, collected in South America by Mr. Cross and sent to the Garden by Sir Joseph Hooker, were received along with the Para rubbers. About one-third of the plants in this consignment were found on arrival to be in bad condition or dead. Of the remainder, five were sent to the Cinchona Plantation. One of the plants in the Botanical Garden is now 10-feet high, and the others vary in height from two to five feet; but they all look more or less weak and lanky, as if the climate were too damp for them. This plant (a species of *Manihot*) was found by Mr. Cross in quite a different kind of country from the Para rubber, and it appears more likely to succeed in India than the latter. The object both with the Para and Ceara rubbers will be to propagate as large a stock of young plants of each as possible, to find out spots with climates suitable for each, and to have small plantations made wherever efficient supervision can be secured in such places.

The Government of India having decided again to offer a prize for the invention of a machine to clean Rhea fibre, a couple of acres of ground were put under this plant in the Botanical Garden, in order that intending competitors might be supplied with green stems to work with. The ground having been trenched and manured, the crop offers to be a good one; but Rhea does not appear to grow with such luxuriance here as in the drier climate of Saharunpore, where the competition for the Government prize is to be conducted.

A number of plants of *ipecacuanha* have been sent to the Botanical Garden at Singapore, which enjoys a climate that ought to suit *ipecacuanha* perfectly. A considerable stock of young plants is kept on hand at the Cinchona Plantation ready for issue to any applicant. But, like vanilla, this valuable drug can never be grown successfully as a crop in any part of Bengal. The experiments made in propagating the plant from root, cuttings, and seed have proved very successful, and it grows luxuriantly under cover, though out of doors the low night temperature of the cold weather proves too severe for it. During the year 26 pounds of the dried root, taken from plants grown in frames at Rungbee, were sent to the medical depôt for use, previous trials having established the excellence of the Sikkim-grown drug.

Further experience has only strengthened the conviction that vanilla cannot be grown as a crop in the climate of Calcutta with any prospect of success. Even in Bangalore, where for a time it was supposed to have promised well, a similar conclusion has lately been arrived at. The plants now in the Botanical Garden will, of course, be attended to, but it is not considered worth while to go to any further expense in attempting to make a plantation of it to be conducted on commercial principles.

A small quantity of the seed of the Carob of the Mediterranean (the *Ceratonia siliqua* of botanists) was sent some time ago to the Botanical Garden to be sown, with the view of introducing this tree into Bengal. The pod of this species contains a sweet, nutritious pulp, which forms an excellent food for cattle and horses. But the tree does not naturally affect a climate and soil in the least like those of the Gangetic delta, and attempts to add it to the fodder plants of Bengal are not likely to succeed: in fact the majority of the seedlings damped off before they were six inches high. About 50 seedlings remain, some of which have been planted out, while the others, which are too small for planting out, remain in pots. But although all have been duly cared for, none are vigorous. An American tree, which also yields a sweet, nutritious pod, has been much more successful than the Carob. This is the *Platycodon samani*, a native of Peru, which, from its supposed property of inducing local showers, is in that country known as the "rain-tree." There are in the Botanical Garden two sets of this tree—one consisting of five trees about eleven years old, and the other consisting of 84 trees, which were planted in an avenue four years ago. The tree is an extremely rapid grower, and seems perfectly at home in the climate and soil of Lower Bengal. It has a thick trunk, which, at a comparatively short

distance from the ground, divides into large branches, which form a spreading and very dense crown. This habit, together with the softness of the timber, make the tree of little value as a source of material for building, but it would probably answer very well as a firewood tree, and as a shade tree there is nothing to equal it in Bengal. It grows faster than any indigenous tree known, and the only introduced tree which rivals it is the *Casuarina equisetifolia*. The girth of the five older trees in the Botanical Garden is on an average seven feet nine inches at three feet from the ground; while of the four-year old trees, which are planted 32 feet apart as an avenue on either side of a road 20 feet wide, the heads now meet across the road, and afford an excellent shade. The average height of these younger trees is about 20 feet, and the average girth of their stems at three feet from the ground is 29 inches. The older trees have this year for the first time given seed; the pod is quite as sweet as that of the Carob, and is abundantly produced, and altogether *Pithecolobium saman* may be considered a much more hopeful source of cattle fodder than the Carob, while as a rapid grower it is unrivalled. Of the seeds of the Carob tree distributed to local officers in the districts only the result of the experiments tried in Monghyr was noticed in last year's report. In the Midnapore jail gardens 86 seeds were planted. Some of these seeds have germinated, and the young plants, though still small, are healthy.

Quantities of seeds of various species of *Eucalyptus* were sent by the Government of India during the year for trial in the Botanical Garden. Of these a considerable proportion failed to germinate, and of those which did germinate the majority of the seedlings damped off during the rainy season, and at the end of the year only three plants remained alive. This result is quite in accordance with former experience, which goes to show that the project of ameliorating the malarious climate of Lower Bengal by the free planting of *Eucalyptus* is perfectly Utopian. The water-logged alluvial soil and hot steamy climate of this part of India are totally unsuited to any species of these Australian trees which has yet been tried. Moreover, it seems highly doubtful whether, even where it grows vigorously, the *Eucalyptus* has any especial effect on malaria. It is understood that many species of *Eucalyptus* grow well at Shillong and at several of the stations on the North-Western Himalaya—a fact which in itself offers a strong argument against the probability of their success in a climate so totally different as is that of Calcutta.

The baobab tree, though a native of Africa, appears for a long time to have been a favourite with Mussulmans in India. Large baobab trees are found planted near Calcutta, Patna, Agra, and in many other places in India. Baobab bark began some years ago to be largely imported into London from the Portuguese Settlements in Africa, and proved an excellent paper fibre. At the suggestion of Sir Joseph Hooker a small plantation of it was made three years ago in the Botanical Gardens with the view of testing the possibility of growing it sufficiently cheaply to be used as a paper fibre. For the past two years these plants received a rough kind of cultivation, and the grass between them

was regularly cut; but as this could hardly be afforded in a plantation conducted on commercial principles, it was not considered fair to the experiment to continue even the little cultivation which the plants had hitherto received. During the past year the young baobabs have therefore had to fight their own battle; and it is quite clear that the majority of them are going to be mastered by the coarse, deep-rooting grasses which infest the soil everywhere in the plains of Bengal. Such plants as enjoy the shade of a large tree in the neighbourhood of the plantation continue to look very fairly healthy, but those that stand in the open are sickly. If baobab were grown for profit, it would be hardly feasible to give it cultivation, however rough, after the first year, and it might not always be possible to give it shade. Considering, moreover, the comparatively slow growth of the species (a tree of 20 years old grown in the open has a girth of about $3\frac{1}{2}$ feet at the base and is about 15 feet high), the conclusion is inevitable that this tree is not likely to afford in India a sufficiently cheap paper fibre. A plant yielding an annual crop is more likely to fulfil the financial conditions of success than any perennial which, like baobab, yields a crop only after many years.

The Superintendent of the Royal Botanical Gardens sent to the India Office samples of four common Indian plants, and suggested that their value as paper fibres should be ascertained. The samples consisted of the stem and leaves of (1) the *bhabar-ghas* (*Eriophorum comosum*) of the North-Western Provinces, which is so largely used as a material for ropes in Upper India; (2) of *Saccharum spontaneum*, a tall, coarse grass, which, under the name of *kash*, is only too abundant in waste places over a large part of India; (3) of *Imperata cylindrica*, the well-known *ooloo*, the commonest grass in Lower Bengal; and (4) of *Typha elephantina*, the *hoyla* of Bengalees, a large bulrush, abundant all over Lower Bengal in marshy places and by the sides of tanks and streams. *Eriophorum*, not growing naturally in Lower Bengal, would reach a seaport weighted by the cost of long carriage, and may therefore practically be excluded from competition in the export market; but the other three are common plants all over the Gangetic delta, and could be brought to Calcutta in any quantity and at very low rates. The four samples were reported on by Mr. Routledge, of the Ford Paper Works, near Sunderland, who has devoted so much attention to the utilization of the young shoots of bamboo as a paper fibre. Mr. Routledge states that "all four will unquestionably make paper. *Eriophorum* is the best and most easily-worked of the four, as a small quantity of bleach brings it into good order. The ultimate fibre is very fine and delicate, rather more so than *esparto*, and of about the same strength; the yield (42 per cent.) is somewhat less. It will make a quality of paper equal to *esparto*." The remainder of Mr. Routledge's report is not very encouraging. The attention of the Inspector-General of Jails has been directed to the use of these grasses as paper-making material, and experiments may be tried in some of the jails in which paper-making has been adopted as a regular jail industry.

In last year's report mention was made of the measures adopted to submit to trial Mr. Routledge's scheme for growing bamboo stocks for paper-making. These trials with the six clumps of bamboo planted out were continued during the year under review.

In the beginning of the rainy season of the year the brushwood of thin woody twigs which had been produced by each clump was cut off; but amongst the twigs there were none of the soft, succulent shoots proceeding from the underground stem, which are required for Mr. Routledge's process. The early rain of the season was particularly favourable to the production of young shoots, and the clumps were again cleared of every twig produced by them since the previous cutting. The result is that, just as last year, the most of the growth consists of hard, woody twigs, which proceed from the bases of the stems cut two years ago. There are only a few of the succulent shoots proceeding from underground, and the total yield of materials succulent enough for Mr. Routledge's process is 120 pounds, or an average of 20 pounds of green material per clump. In a pamphlet published on the subject, Mr. Routledge estimates that the green raw material dries to one-fourth of its weight, and that the dry material gives 60 per cent. of good paper-stock. The yield during the first year was about 17 pounds per clump, equal (allowing 80 clumps to the acre) to about 1,360 pounds per acre. During the second year the yield was nothing, and during the third year it was three pounds per clump, or equal to 240 pounds per acre. Mr. Routledge estimates that (according to a method of planting which he proposes, but which is believed to be quite impracticable,) the yield per acre would be six tons, and that this yield would be annual. The value of the paper-stock delivered in England would be from £20 to 25 per ton, so that, even assuming (which is by no means the case) that green bamboos are of very little value, the proposed new industry does not present a hopeful financial aspect.

During the course of the year the Government of India expressed an opinion that it was more important to stimulate and develop the production of articles known in the country than to initiate costly experiments in articles not commercially known, and of which the ultimate success was problematical. One of these articles was the ground-nut, *Arachis hypogaea*, which produces a very large proportion of excellent oil extensively used in Europe as well as in India. Statistics were furnished showing that in 1875 France imported nearly 100,000 tons of the nut, valued at 33,503,000 francs. The Government of India therefore called for a report of the consumption of the seed and oil in the country, and the possibility of developing the cultivation and trade of this article. The Superintendent of the Botanical Garden, who was consulted about the sunflower, reported that he concurred in the conclusions arrived at, that the plant possesses no special value as a preventive or neutralizer of malaria, and that the marvellous effects which are sometimes ascribed to it as a sanitary agent are due more to the clearing and drainage which are required

Sunflower and ground-nut.

before the plant can be successfully grown than to any peculiar virtues inherent in the plant itself. The cultivation of the plant for the sake of the oil contained in its seed would not be a profitable speculation, and no practical results were expected from a chemical analysis of the oil, as lubricatory oils are valued more on account of their physical than their chemical properties. With regard to the ground-nut, it was ascertained from local officers that the nut was not largely grown in any of the districts of Bengal, and that where it was grown it was not cultivated as an article of trade. None of the local officers made any suggestions as to the possible development of the cultivation of, and trade in, ground-nuts. The Customs authorities have, however, been requested to record in both foreign and coasting trade returns the exports of ground-nut.

The great wheat-fields of India are the North-Western Provinces, the Punjab, and the Central Provinces. The surplus produce of these places is mostly carried by railway to Bombay or Calcutta. In the Behar province, however, wheat is also an important food-staple, and there is a large surplus production. Bhagulpore is the chief wheat-producing district in Behar, and next comes Monghyr. In that part of the Lower Provinces which is called Bengal, to distinguish it from Behar, Orissa, and Chota Nagpore, wheat is not one of the chief articles of consumption; and the only districts from which it is exported in any appreciable quantity are Nuddea and Moorshedabad, where the lands are high and the cold-weather crops of more importance than is ordinarily the case in Bengal districts.

The grand total of wheat imported into Calcutta during 1877-78 amounted to 71,30,477 maunds, as against 61,83,931 maunds in the preceding year, as shown below :

						1876-77.	1877-78.
						Mds.	Mds.
By rail	...	...	...	...	...	48,22,487	49,70,181
„ boat	...	...	...	...	...	16,60,404	21,12,142
„ steamer	...	...	...	...	...	.....	13,751
„ road	...	...	...	...	...	1,040	4,403
Total						61,83,931	71,30,477

These imports are chiefly intended for export by sea.

The development of the export trade in Indian wheat has attracted considerable attention of late years, and the abolition of export duty combined with other causes has led to a great increase

in this trade in Bengal, as will be seen from the following figures of exports:—

	1873-74.		1874-75.		1875-76.		1876-77.		1877-78.	
	Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.
To United Kingdom	347,229	12,89,155	161,361	6,74,606	1,236,223	36,63,563	3,903,926	1,63,64,055	2,118,792	1,72,88,098
" Belgium	...	...	...	...	...	...	96,448	3,31,106	...	...
" France	12,612	46,410	3,696	20,436	10,617	27,320	104,981	3,23,842	73,376	3,11,782
" Maffa	...	...	...	...	...	...	181,827	6,36,042	41,974	2,12,151
" Mauritius	82,774	1,52,783	44,046	1,98,088	28,762	2,10,509	92,915	3,25,535	126,780	5,43,880
" Reunion	63,153	2,21,871	33,431	1,45,030	...	...	41,798	1,41,885	26,107	1,27,350
" Straits Settlements	35,375	1,30,317	31,028	1,45,573	25,006	57,577	41,014	1,44,030	27,541	1,18,572
" other countries	10,680	43,748	2,401	10,276	314	1,912	25,313	8,555	131,292	5,88,509
Total foreign countries	459,443	13,84,748	279,350	11,80,613	1,380,821	39,80,703	3,882,213	1,23,36,374	4,544,302	1,91,13,084
Indian ports	30,736	1,16,313	3,541	16,005	3,947	13,410	92,788	3,31,430	267,140	9,08,350
GRAND TOTAL	521,949	20,10,130	282,824	12,03,034	1,384,809	40,05,507	3,980,379	1,26,82,580	4,753,202	2,00,89,021

The export to foreign countries of this grain has greatly increased. It is more than three times as great in quantity as it was two years ago, and has increased 17 per cent. in the past year as compared with 1876-77. The chief causes of this last increase may be found in the practical closing of the Black Sea ports of Russia and to the exceptionally large crop in the North-Western Provinces, Oudh, and the Punjab. The export of wheat (like cotton) to Europe is generally dependent on the American crop. Thus in 1875 there was a full crop

in America, but prices in Europe were low, and the crop here short; during the past year the crops in America and England were short, while the crop in this country was large, and the prices here being low, and the opportunities in freight and exchange favourable, the result was the increase shown. The Suez Canal, no doubt, has a very direct influence on the shipment of wheat, because, in consequence of the shortened duration of the voyage, the risk of damage from weevil is greatly reduced, and the wheat arrives in far better condition than when it was exposed to a three-months' voyage round the Cape in wooden vessels. About one-half of the exports of wheat to the United Kingdom was made last year *via* the Suez Canal.

The exports of wheat during the current year are likely to fall off. The crop is said to be deficient, and the reserve stock in the country to be greatly reduced. The trade accounts of the United Kingdom show that in the three months of April to June 1878 eight millions of hundredweight of wheat were imported from the United States, against 4½ millions during the corresponding period of the previous year.

Deducting the sea-borne exports from the total quantity imported into Calcutta during the past year, there remains a surplus of 6½ lakhs maunds, as against 10½ lakhs in the previous year, for local consumption in Calcutta.

Forests.

THE only new forest area inspected during the year was that of the Koderma reserve, in the north of Hazareebagh, which was notified as a reserve forest in July 1876, without having been subjected to detailed examination. The result of the Conservator's inspection in February 1878 went to show that the forest is in a very poor and reduced condition, and that it is desirable to release from the reserved area some 24 square miles of country in order to provide a supply of wood for the neighbouring villagers, who could then be excluded without hardship from the remaining area.

Only 40 square miles of forest were added to the Government reserves during the year, bringing the total area up to 3,430 square miles. It is in contemplation, however, to take up an extensive tract in the Chittagong Hills, and to increase the area considerably in Darjeeling and Julpigoree; while, on the other hand, the forests in the Damin-i-Koh have been made over to the care of the local officers. At the close of 1878-79 it is expected that there will be 4,406 square miles of forest under this Government, of which 823 square miles lie in the lower Himalayas and the adjoining Terai and Dooars, and the rest in Chittagong, the Sunderbuns, Chota Nagpore, and Shahabad. The open Sunderbun forests, which are Government waste, are also to be declared a protected forest, and to be managed by the Forest Department. In view of this extension of forest conservancy in Bengal the propriety of dividing the province into two Conservators' charges has been mooted, and is advocated by the present Conservator. It would be preferable to have one Conservator only, who should be at the head-quarters of Government, and to strengthen the staff of trained Deputy Conservators; but it may not be possible for the Government of India to arrange this.

The reserved forests, as they now stand, may be thus classified:—

	Square miles.
1. Sâl forest, with savannah, mixed forest, and lower hill forest containing sâl	1,090½
2. Khair and sissu forest	113½
3. Upper hill forest	75
4. Sundri forest	1,581
5. Chittagong mixed forest	570
Total ...	3,430

Demarcation was extended over 323 square miles during the year, and there are now only eight square miles in Darjeeling, 18 in Julpigoree, and 460 in Chota Nagpore remaining to be demarcated out of the 3,430 miles already taken up.

Demarcation of boundaries.

The policy of the Conservator has been to divide the forest charges into small manageable areas, such as one executive officer can properly administer. He considers that there should be ten such charges in Bengal, to manage which two Conservators and 13 other superior officers are required. The present sanctioned scale gives nine officers of the rank of Assistant Conservator and upwards, and (say) two Sub-Assistant Conservators. Even if there be only one Conservator allowed, some increase of the forest staff will very soon be required.

Forest staff for Bengal.

For subordinate establishments of all kinds a lump sum of Rs. 3,500 per mensem is at present sanctioned, but this must be raised to Rs. 4,000 to enable the department to manage the areas now being added.

There were during the year only 112 prosecutions for breach of forest rules, as against 233 in 1876-77. The Conservator reported that the decrease is owing to forest protection having become more effective, and he considered that the few attempts made to violate the rules prove that forest conservancy does not press too hardly upon the people. The great majority of the cases occurred in the Sunderbuns, where, however, conviction was difficult owing to the immense area under forest and the existence of private grants in the neighbourhood of the Government reserves. In 95 Sunderbun cases conviction followed in only 26. In 17 cases instituted elsewhere conviction followed in 11.

Prosecutions for breach of forest rules.

The forest officers cut during the year 55½ miles of new fair-weather roads in Kurseong, Buxa, and Chittagong, besides repairing 63 miles of old road in Buxa and Kurseong and clearing 250 miles of boundary paths. Attention was again drawn to the advisability of opening out the old Te Valley road. A resurvey of this route has already been ordered, and a good bridle-path will be constructed on general grounds.

Roads.

During the year 111 acres were added to the plantations, making the total area 524 acres. The chief plantations are those of oak, chestnut, magnolia, and walnut (144 acres) in Darjeeling; of teak, toon, sâl, and sissu (406 acres) at Bamunpokri (in Kurseong) and Sitapahar (in Chittagong); and of sâl (36 acres) in Buxa. Systematic planting for the maintenance of the firewood supply of Darjeeling will now be undertaken, and 39 acres have already been planted in June and July 1878.

Plantations.

A communication from Dr. King, Superintendent of Botanical Gardens, showed the result of the continued experiments carried on with certain economic plants and trees. There can be no doubt that neither the eucalypti nor the carob tree are at all likely to thrive in the Gangetic delta. The prospects of Para and Ceara rubber plants are more promising. But neither the baobab nor the bamboo can be cultivated so as to yield a cheap paper stock.

The year under review was particularly unfortunate as regards fires owing to continued dry and windy weather. Arrangements were made to protect 122,728 acres, but failed as regards 43,894 acres. The sum spent on fire protection during the season was Rs. 1,983. This is a most important part of the duty of the Forest Department, and it will be better to spend even more money if it will secure success in keeping out fires.

Revenue and expenditure.

The financial results of the working of the Forest Department in Bengal for the last seven years are given in the following table:—

YEARS.					Receipts.	Charges.	Surplus.	Area of reserved forests.
					Rs.	Rs.	Rs.	Square miles.
1871-72	...	...	...	...	87,260	67,506	19,754	106
1872-73	...	...	...	...	1,16,690	62,554	54,136	106
1873-74	...	...	...	...	1,23,732	81,068	42,664	120
1874-75	...	...	...	...	1,85,914	98,454	87,460	1,467
1875-76	...	...	...	...	1,98,274	1,39,086	59,188	2,585
1876-77	...	...	...	...	2,32,401	2,11,689	10,712	3,390
1877-78	...	...	...	...	4,32,363	2,61,112	1,71,251	3,430

Upon this the Conservator remarked:—"These figures show that the revenue has been nearly doubled during the year under review, and the cash surplus has risen from Rs. 10,712 to Rs. 1,71,251. The value of stock on hand has fallen by Rs. 14,913; hence the value of the year's transactions amounts to Rs. 1,56,338, as compared with Rs. 87,468 in 1875-77, so that a great improvement has taken place in every respect. The Conservator feels confident that the surplus in future years will be still greater, and that the Government forest estates in Bengal may now be said to have become a source of permanent and increasing returns to the State."

Arranging the receipts and charges of 1877-78 according to the main budget heads, they show as follow:—

Receipts.		Rs.	Charges.		Rs.
Departmental timber operations.	From wood brought to depot by departmental agency; from confiscated, drift and waste wood	1,70,621	Cost of timber operations by the department and in recovering drift; half the total cost of departmental cattle, plant and tools, and one-quarter the total cost of the establishment		1,24,366
Other revenue	From wood removed by private purchasers, &c.; from minor produce and miscellaneous	2,61,742	Cost in connection with removal by private purchasers; collection of dues on minor produce; miscellaneous charges, one-quarter of total cost of cattle, plant and tools, and half the cost of establishment		74,068
Formation, protection, and improvement of forests	.....	.....	Cost of forest organization; treatment and creation of forests; works for development of forests; one-quarter of total cost of cattle, plant, and tools, and one-quarter cost of establishment		62,678
Total	...	4,32,363	Total	...	2,61,112

Upon these results the Conservator remarked :—

“From these figures it follows—

“1st.—That the departmental timber operations have yielded a surplus of Rs. 46,255, equal to 27 per cent. of the receipts on account of timber sold from depôts, although the expenditure charged against these operations includes a portion of the pay of establishments, &c., of the Palamow, Sunderbuns, and Chittagong divisions, where no departmental timber operations have been conducted.

“2nd.—In spite of our having spent Rs. 62,678 on the formation, protection, and improvement of the forests, we have still a cash surplus of Rs. 1,71,251, which is equal to 40 per cent. of the gross receipts.”

Forest conservancy in Bengal may now be reckoned an assured success from a financial point of view, and, as it is elsewhere stated that with proper management the Government reserves will suffice to meet the wants of by far the greater portion of the province, there is every reason to be satisfied with both the present position and future prospects of the department.

In the foregoing paragraphs the working of the department has been treated as a whole. The leading facts in connection with each of the forest divisions may now be briefly noticed.

I. The Darjeeling Division.—The division known in former years by this name has now been subdivided into three forest charges, styled the Darjeeling, Teesta, and Kurseong divisions. In the division of *Darjeeling* proper there are at present 26 square miles of gazetted reserves; but the area will by the end of the current year be 38 square miles, stocked with oaks, chestnuts, magnolias, laurels, maples, and a great variety of other trees. The maple is assuming a very important place in the forests near Darjeeling, yielding as it does a very fair firewood, and being raised with the least amount of trouble. It will in future form the main stand-by in reproductive measures, the more valuable trees being planted here and there among the maple woods. There are now five acres under Spanish chestnut at Rungaroon, but the results are not satisfactory, and it is not intended to sow more seed of this kind to Bengal.

The large and growing demand for firewood and charcoal for the cantonment and station of Darjeeling and the tea gardens near made it necessary to bring the working of the forests entirely under departmental control, and to exclude private purchasers from the forests entirely. The Conservator is thus able to clear and thin the blocks systematically, and to plant them up again. During the year 1,67,173 maunds of firewood and 5,872 maunds of charcoal were sold at an average cost of Rs. 24-2-3 per 100 maunds, giving a profit of about Rs. 8 per 100 maunds.

The receipts of this division were altogether Rs. 49,790, and the charges Rs. 36,692; the result being a surplus of Rs. 13,098.

II. The Teesta Division.—This division has not yet been fully formed. A large area in the Daling sub-division is about to be added to it, which will raise the area from the present figure of 61 square

miles to 255 square miles. It will then be subdivided into two charges—(1) the Teesta division, with 134 square miles, and (2) the Daling division, with 154 square miles. These areas contain all the various classes of forest found in the Darjeeling district at all elevations, and the lower ranges at any rate are certain to prove very valuable. This is not, however, as yet a paying division, its receipts being only Rs. 1,946, against an outlay of Rs. 10,188. But it is expected that the demand for timber, firewood, and charcoal likely to arise from the opening out of tea gardens in the Daling sub-division will very soon bring the balance to the right side of the account.

III. The Kurseong Division.—This division comprises the reserves lying on the outer hills from Kurseong downwards and in the adjoining Terai. The total area, after adjustments with the Teesta division, and including certain blocks purchased from private parties since the close of the year, will amount to 75 square miles. There is no oak or rhododendron in this division, but with that exception most of the characteristic trees of the district are found. In the Terai sâl is the prevailing wood, and there is also a good deal of khair and sissu on the river-banks. The management of this division is peculiarly difficult, owing to the unhealthiness of the Terai and lower hills. It includes the Bamunpokri plantation already noticed, which now covers an area of 215 acres. In this originally only teak was planted, which so far was not done badly, but toon, sâl, and sissu have since been added. A few plants of mahogany were tried, but only three are now alive. The total outlay on planting up to date has been Rs. 28,118, and by 1880 it will probably amount to Rs. 35,000, after which the plantation will, it is hoped, be self-supporting. The expenditure will have been about Rs. 160 per acre, and, considering that the locality is one where the rank grasses have to be cleared five or six times each season, the Conservator thinks it not excessive, especially as every stick from the plantation will command a ready sale. A small plantation of India-rubber trees is also thriving. Fortunately, although the division suffered severely from fires, Bamunpokri escaped; but the average cost of this protection for the last two years has been 12 annas 6 pie per acre.

This division has supplied during the year large quantities of timber for the Northern Bengal State Railway and for the construction of bridges on the Ganges-Darjeeling road. Indeed, the Conservator is of opinion that these forests have now been overworked, and that the cutting of sâl should, if possible, be reduced for a year or two, until the extra cuttings of 1877-78 have been made up. The receipts of the division were Rs. 98,451, and the charges Rs. 45,930; showing a net surplus of Rs. 52,520, or Rs. 543 per square mile of the area actually worked.

IV. The Julpigoree Division.—This division consists of the forests between the rivers Teesta and Tursa in the Western Doon. The area will at the close of this year amount to 169 square miles. It stood at 140 square miles on the 1st April 1877, and 12 miles were added in 1877-78. The forests suffered severely from fires during the year, no less than 5,900 acres having been burnt. These forests were much exhausted when taken up, and it was intended not to work them for large timber for at least 25 or 30 years. But the demand for

sleepers for the Northern Bengal State Railway compelled the cutting of sâl both in 1876-77 and 1877-78. The receipts of the division were Rs. 12,580, and the charges Rs. 16,546. It is hoped to make it pay its expenses in future by the sale of firewood, charcoal, &c., to the tea gardens in the neighbourhood.

V. The Buxa Division.—The Buxa reserves cover an area of 250 square miles between the Tursa and Sunkos rivers in the Western Dooars. In this division an attempt is being made to protect the reserves from fire by planting a thick belt of sâl, 100 feet broad, along the boundary. Good progress is being made with this, but meantime the injury done by fires is very great, no less than 36,440 acres having been burnt in the year out of an area of 103,900 acres sought to be protected. It is observed, however, that the people in the neighbourhood of the forests are beginning to understand better the necessity of caution in setting fire to grass and to co-operate better with the department.

This division also has felt the demand for sleepers and timber for the Northern Bengal State Railway, and 2,776 green trees and 1,932 dry trees and pieces were cut during the year. The actual receipts were, however, only Rs. 37,153, against charges amounting to Rs. 50,658. This deficit is, however, owing to the fact that Rs. 12,095 were disbursed during the year on account of former years, and that a large stock of sleepers cut and carted during the year were only made over and paid for in April. The division is now really a *surplus* division.

VI. The Palamow Division.—The blocks of forest to be reserved in this division were re-arranged during the year so as to secure greater compactness. It now comprises 216 square miles—179 in Palamow and 37 in Shahabad. There are difficulties in connection with the boundaries of the Rhotas block in Shahabad, which the revenue authorities are now investigating. Nothing has yet been done in this division beyond demarcation. The forests need rest, and only minor produce and a small quantity of timber to meet local requirements can be sold. The receipts of the year were Rs. 1,006, and the charges Rs. 16,088.

VII. The Sunderbuns Division.—The area of the reserves is here unchanged, amounting to 1,581 square miles. The area outside the reserves, used chiefly for fuel forest, is to be shortly placed under departmental management as a protected forest, and the establishment will have to be reorganized accordingly. But meantime great progress has been made in checking the removal of wood without payment. Thus in 1876-77 the department had cognizance of the removal of only 43,18,157 maunds, but in 1877-78 it collected dues on 91,03,250 maunds. The receipts were Rs. 1,73,999, and the charges only Rs. 33,453; giving a surplus of Rs. 1,40,546, or Rs. 89 per square mile. The actual charges made are extremely low—one anna per maund for sundri timber, and one pice per maund for any other timber and firewood.

VIII. The Chittagong Division.—The present area of the reserves in Chittagong is 570 square miles, but it is in contemplation to increase the reserves to 1,350 square miles; and it has been decided in any case to give over all the rest of the district forests to the management of the Deputy Commissioner, reducing the rate of river tolls on produce from these open tracts to a small *ad valorem* fee. The Sitapahar plantation in this division has now 185 acres under

teak. With this it is proposed to mix t^oon, and it is intended to plant jarul in the lower parts of the reserve, where teak does not flourish. The reserves have not yet been worked for timber, and the income from river tolls during the year showed a still further falling off as compared with 1876-77, the receipts being Rs. 57,378 and charges Rs. 27,132; giving a surplus of Rs. 30,246, against Rs. 39,445 in the previous year, Rs. 64,953 in 1875-76, and Rs. 98,608 in 1874-75. The people have been suffering from bad seasons, and there is an import of cheaper timber from Arrakan.

IX. Koderma and Saranda Pir.—The Koderma reserve in Hazareebagh is to be reduced to 36 square miles. Nothing has yet been done in it or in the Saranda Fir reserve of 400 square miles in Singbhoom.

Manufactures and Mines.

THE corresponding chapter in last year's Administration Report showed the yield of the indigo crop for 1874-75, 1875-76, and the estimated outturn for 1876-77, as follows:—

								Maunds.
1874-75	...	...	...	...	...	...	...	1,27,802
1875-76	...	...	...	...	...	...	...	1,02,860
1876-77	...	...	...	...	...	...	...	1,37,000

The seasonable fall of rain during 1876-77 improved the prospects of the crop, and the yield has been in excess of expectations.

The following statement, prepared from Messrs. W. Moran & Co.'s trade circular, gives the actual yield of the indigo crop of 1876-77 compared with the estimate of that year and the probable outturn of 1877-78:—

		Estimated yield. 1876-77.	Actual yield. 1876-77.	Estimated yield. 1877-78.
Jessore	...	3,220	3,477	4,500
Nuddea	...	2,970	3,077	2,200
Midnapore	...	900	887	720
Burdwan	...	1,060	1,019	620
Maldah	...	1,100	889	360
Moorshedabad	...	5,620	4,000	2,000
Rajshahye and Pubna	...	1,400	1,429	500
Bhagulpore	...	2,930	3,494	2,100
Purneah	...	4,800	5,004	3,000
Rungpore and Patna	...	2,000	3,326	2,000
		21,000	26,302	18,000
Monghyr	} ...	42,000	4,162	
Tirhoot			37,020	17,000
Chumparun		21,500	21,576	9,900
Chupra		20,000	19,493	8,400
		83,500	82,251	36,000
Benares—				
European	} ...	7,500	7,103	8,500
Native			5,288	7,000
			12,391	15,500
Doab—				
European	} ...	22,000	5,473	7,000
Native			28,732	33,500
		29,500	54,205	40,500
		1,37,000	1,55,149	1,10,000

The following statement shows the exports of indigo to foreign countries during the last five years:—

	1873-74.		1874-75.		1875-76.		1876-77.		1877-78.	
	Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.
To United Kingdom	47,169	1,68,04,514	33,570	1,19,71,974	51,524	1,38,94,175	40,833	1,38,19,794	44,000	1,38,94,649
„ Austria-Trieste	5,491	20,58,975	5,457	20,73,000	6,411	20,06,784	5,513	21,05,623	6,618	21,55,166
„ France	9,337	34,93,377	8,076	31,34,969	16,173	49,62,502	11,961	43,02,570	29,932	99,79,908
„ Italy	1,377	5,39,545	993	3,77,508	993	2,98,305	1,219	4,43,922	1,367	4,63,308
„ Egypt	274	87,655	63	21,900	446	1,43,292	315	97,390	2,277	6,07,375
„ United States	5,144	16,13,489	2,331	7,73,761	3,912	8,74,324	6,157	17,65,053	9,826	24,02,661
„ Persia	2,372	7,44,200	1,465	4,56,954	727	2,57,351	664	2,65,686	1,137	2,98,355
„ Turkey in Asia	1,374	5,50,702	509	2,31,517	2,965	7,55,454	2,194	6,74,697	4,149	11,46,734
„ Other countries	1,017	3,67,646	1,667	7,57,556	1,042	3,43,357	223	85,739	16	4,412
Total ...	73,705	2,62,50,103	54,423	1,91,16,099	84,223	2,35,35,774	69,373	2,35,66,623	99,492	3,04,87,063
Quantity in Indian maunds, and average value per Indian maund.	1,00,331 maunds.	@ 262 per maund.	74,683 maunds.	@ 267 per maund.	114,644 maunds.	@ 205 per maund.	94,433 maunds.	@ 250 per maund.	135,207 maunds.	@ 225 per maund.

There was an increase of nearly 43 per cent. in the exports over the previous year. This was due to an unusually abundant crop in Tirhoot, the result of atmospheric influences, the weather having continued dry beyond the usual period. The Bengal crop was only a moderate one. Prices were 10 per cent. below those of the previous year, owing in some measure to political uncertainties and the larger production of the year. The increase of exports was general, the relative proportion being marked in the case of Egypt, which took seven times the quantity of the previous year. The increase of consumption in France was 155 per cent., in Turkey in Asia 89 per cent., in Persia 71 per cent., and in the United States 59 per cent. The large quantity, however, shown to have been consumed by France may be attributed rather to the effect of direct communication *via* the Suez Canal than to the actual larger consumption of the dye by France. In former days the French market found it more convenient to supply itself through the London market, and consequently the direct shipments were not so large. The canal now affords France the opportunity of purchasing for herself in the local market and shipping direct without foreign intervention. The figures therefore show a result which may be considered rather an indication of the influence of the canal upon continental trade than as showing an increase of more than 155 per cent. in the consumption of indigo by France.

The bulk of the tea which finds its way into the Calcutta market comes from the tea-growing districts of Assam.

Tea.

Tea is also cultivated to a greater or less extent in the Cooch Behar, Dacca, Chittagong, and Chota Nagpore Divisions.

The subjoined statement illustrates the state of tea cultivation in Bengal during the years 1875-76, 1876-77, and 1877-78.

DISTRICT.	Number of plantations.	Approximate average elevation.	AREA IN ACRES.				APPROXIMATE YIELD IN POUNDS.			Average yield in pounds per acre of mature plants.	Cost of cultivation per acre.	Cost of manufacture per acre.	REMARKS.
			Mature plants.	Immature plants.	Taken up, but not yet planted.	Total.	Black.	Green.	Total.				
1875-76.													
Darjeeling*	121	From 300 feet to 6,500 feet.	14,934	7,308	73,113	101,275	4,610,733	...	4,610,733	369	Rs.	Rs.	
Julpigoree	3	From 500 feet to 600 feet	...	938	1,453	1,741	5,600	...	5,600	...	...	...
Dacca	6	" 13 " to 21 "	29	2	...	31	4,600	...	4,600	160 lbs 11oz.	...	...
Mymensingh	2	" 14 " to 44 "	53	...	...	53	5,371	...	5,371	100	...	...
Chittagong	19	" 40 " to 500 "	936	639	24,724	36,339	No information available.						
Noakholly	1	" 40 " to 50 "	15	1	8	24	320	40	360	20	...	...
Chittagong Hill Tracts ...	4	" 80 " to 200 "	439	613	256	1,338	160,760	...	160,760	366	...	...
Hazareebagh	3	2,177 feet	647	72	...	719	93,054	1,733	94,837	144	...	...
Lohardugga	11	Not given	240	150	1,334	1,654	53,630	...	53,630	245	...	...
Total ... ..	...	From 14 to 6,500 feet...	17,313	9,063	105,813	133,194	4,909,343	1,933	4,941,166	285	...	...
1876-77.													
Darjeeling†	132	From 300 feet to 6,500 feet.	15,605	9,333	81,609	106,637	4,181,622	...	4,181,622	213	...	...
Julpigoree	13	From 500 feet to 1,000 feet.	23	795	3,305	4,213	29,520	...	29,520	240	...	...
Dacca	6	From 13 feet to 21 feet	29	2	...	31	3,722	...	3,722	123	...	...
Mymensingh	2	" 14 " to 44 "	53	...	...	53	3,517	...	3,517	65	...	...

Chittagong†	20	" 40 " to 500 "	835	1,072	13,497	15,394	No information available.					
Noakholly	1	" 40 " to 50 "	15	1	8	24	329	80	600	40	.....	.....
Chittagong Hill Tracts ...	1	" 50 " to 220 "	220	230	2,106	2,556	46,571	...	45,571	211	.....	.....
Hazareebagh	8	2,177 feet ...	668	50	.....	718	47,717	...	47,717	71	.....	.....
Lohardugga	21	Not given ...	320	910	2,270	3,506	67,610	...	67,610	230	.....	.....
Total		From 1½ to 5,000 feet ...	17,548	12,308	102,391	133,182	4,380,799	80	4,350,897	246	.....	.....
1877-78.												
Darjeeling	142	From 200 to 5,000 feet	13,120	7,965	9,453	35,538	5,250,910	...	5,250,910	350	.....	.....
Jalpigoree	21	" 300 to 1,000 "	233	2,087	4,754	7,074	33,139	...	33,139	245	.....	.....
Chittagong	20	" 40 to 500 "	814	765	12,350	13,801	230,620	164	230,734	320	.....	.....
Noakholly	2	" 150 to 200 "	155	60	245	466	30,500	...	30,500	245	.....	.....
Chittagong Hill Tracts‡ ...	5	" 55 to 220 "	112	175	236	526	16,000	...	16,000	335	.....	.....
Dacca	6	" 13 to 21 "	29	2	.....	31	5,311	...	5,311	161	.....	.....
Mymensingh	1	Information not furnished.										
Hazareebagh	4	Average 2,358 feet ...	690	145	15	680	89,874	...	89,874	164	.....	.....
Lohardugga	20	From 500 to 2,500 "	309	589	6,374	4,372	94,000	...	94,000	242	.....	.....
Total	221	From 13 to 5,000 feet ...	30,462	11,793	30,387	62,642	5,788,654	164	5,768,818	293	.....	.....

* The figures for this district are given for the calendar year 1875.

† The figures for this district are given for the calendar year 1876.

‡ Returns for some gardens refused this year.

§ Particulars furnished for 2 gardens only.

It will be seen that in 1877-78 there were in the entire province of Bengal 221 tea gardens, situated in altitudes varying from 13 to 5,000 feet above the level of the sea, covering an area of about 63,000 acres and producing about 6,000,000 pounds of tea per annum. The statistics furnished do not convey a precise idea of the state of the tea industry in Bengal, as managers of several gardens have either expressed their inability, or have refused, to supply the information required by Government.

The last two columns of the statements have been left blank. From many of the plantations figures could not be obtained of the "cost of cultivation per acre" and the "cost of manufacture per pound," and therefore no information, even approximately correct, can be given of the average cost of cultivation and manufacture in each of the tea-growing districts. It has been represented by local officers that the planters' books do not always exhibit expenditure divided separately under the two heads of "cultivation" and "manufacture," and many of them who are not skilled in accounts, while willing to supply Government with any information which they may have collected for their own use, are averse to go to the trouble of compiling figured statements for purposes other than their own.

There were other difficulties felt in collating and consolidating the figures obtained from different planters, who, not clearly understanding what was required, furnished figures calculated on different principles.

The total quantity of tea imported into Calcutta during the year 1877-78, as compared with the imports of the preceding year, was as follows:—

		1876-77		1877-78.	
		Mds.	lb	Mds.	lb
By river steamers	...	2,66,714	21,337,120	3,18,420	25,473,600
„ East Indian Railway	...	82,661	6,612,880	1,05,938	8,475,040
„ Eastern Bengal Railway	...	12,691	1,015,520	12,866	1,029,280
„ country boats	...	1,113	89,040	7,700	616,000
Total		3,63,182	29,054,560	4,41,921	35,593,920
By sea	...	6,469	517,501	6,117	489,386
GRAND TOTAL	...	3,69,651	29,572,061	4,51,041	36,083,306

The following statement exhibits the exports of Bengal tea during the year 1877-78, compared with previous years:—

	1873-74.		1874-75.		1875-76.		1876-77.		1877-78.	
	lb.	Rs.	lb.	Rs.	lb.	Rs.	lb.	Rs.	lb.	Rs.
United Kingdom	19,00,013	1,72,12,429	20,32,176	1,91,63,925	24,158,320	2,14,38,279	27,465,055	2,57,46,042	33,133,453	3,01,23,090
Australia	73,429	69,558	56,774	56,762	43,416	43,330	42,173	42,677	22,717	21,329
Other countries	21,691	20,116	34,339	34,231	18,722	18,183	21,964	18,323	30,723	26,481
Total	19,15,124	1,73,02,703	21,023,909	1,92,31,891	24,220,458	2,15,00,366	27,529,198	2,58,07,047	33,186,893	3,01,73,600
Average value per lb	14 annas and 5 pie.		14 annas and 7 pie.		14 annas and 2 pie.		15 annas.		14 annas and 6 pie.	

The tea industry is rapidly increasing in importance as an export. In 1877-78 the exports were 5½ millions of pounds more than in the previous year. The figures shown represent a valuation of 14 annas and a half per pound. This, however, has been ascertained to be incorrect, the value not being more than 11 to 12 annas a pound. It is not within the power of a Custom House to test the value of tea as it is passed for export. There is not a skilled establishment that could taste and value tea; and if there were, it would cause great inconvenience to shippers if the chests had to be opened during the rainy weather, when the bulk of tea is shipped, and therefore shippers' value have to be accepted. Moreover, another important factor of uncertainty in the matter is that it is rapidly becoming the practice for companies manufacturing a large quantity of tea to abstain from offering it for sale to the local market, as they prefer to ship it direct to London, thus avoiding many local charges and some risk. It follows that the prices assigned to teas on export by the exporter must always be more or less inaccurate. In consequence of this, and seeing that the value of 14 annas 6 pie was notoriously too high, inquiry was made amongst those chiefly engaged in tea sales, and it was ascertained that the average value of tea could not be estimated at more than 11 to 12 annas a pound. As regards the quantity and quality of the tea of this year, the increase in quantity was mainly due to the circumstance that three years ago there was a great extension of cultivation, and this is now coming into full bearing and increasing the supply greatly, though extensions are not now being carried on to the same extent. Moreover, owing to high prices in former years, there has been a great tendency in manufacture to sacrifice quality for quantity. This, in the face of a large competing crop from China, depressed the value of any tea in the manufacture of which quality had not been attended to, and the general result has been that although the export of tea has shown an increase in quantity the pecuniary result has not been equally satisfactory, and the advices from home insist strongly upon the vital necessity of very careful manufacture in respect of quality if Indian tea is to compete successfully with China tea in the London market. The export has been almost entirely to the United Kingdom, the exports elsewhere being trivial in comparison.

The excess of imports over exports by sea amounted during the past year to 2,562,691lb, or 32,034 maunds, as against 1,885,573lb, or 23,570 maunds, in the preceding year.

The following comparative statement shows the quantity of China and Indian teas sent to Great Britain since the calendar year 1868:—

Years.	Export from China.	Export from British India.	Years.	Export from China.	Export from British India.
	lb	lb		lb	lb
1868	£42,111,486	9,095,444	1873	Not available.	
1869	126,482,613	11,241,070	1874	131,659,998	18,440,494
1870	125,593,898	12,923,993	1875	170,966,836	25,784,866
1871	151,636,636	15,150,958	1876	155,897,192	28,126,854
1872	160,520,882	16,445,970	1877	153,379,753	31,245,251

It is understood that coffee of very good quality is produced in Chittagong, where the land and climate are said to be well suited to the cultivation of the

plant; but no particulars of cultivation there have been received from the planters. There are no coffee plantations in any other part of this province, though a few plants may sometimes be seen in private gardens.

There are, as far as can be ascertained, 162,245 acres under cotton

Cotton.

cultivation in Bengal, yielding 138,824 cwt. of cleaned cotton. The largest area under cotton cultivation is in the district of Sarun, where 31,159 acres were under plant during the year. Next in order of extent come the Chittagong Hill Tracts, 28,000 acres; Cuttack, 20,025 acres; Lohardugga, 15,000; Durbhunga, 12,000; Midnapore, 10,000; and Manbhoom, 10,000 acres. But although Sarun is shown to have had the largest area under cultivation, the outturn was not sufficient even for local requirements. The largest outturn was in the Chittagong Hill Tracts, where it amounted to 50,000 cwt. Next in order come Midnapore, with an outturn of 12,857 cwt.; Cuttack, 12,512; and Julpigoree, 10,353 cwt. The cultivation of cotton is not of much importance in Bengal, except in the Chittagong Hill Tracts, in Cuttack, and parts of Julpigoree.

There is no attempt on the part of cultivators to extend or improve this industry, and it is gradually, but surely, languishing owing to the introduction and increasing use of foreign twists and cloth.

The districts which exported cotton during the year are the following in order of importance:—

	Mds.		Mds.
Chittagong Hill Tracts ...	66,755	Tipperah ...	2,045
Julpigoree ...	15,000	Burdwan ...	300
Lohardugga ...	7,000	Bankoora ...	300
Mymensingh ...	4,826	Darjeeling ...	81

The cotton grown in the other districts of the province is mainly used for home consumption.

The quantity exported from the districts amounted to 96,510 maunds, the value of which is estimated at Rs. 9,13,337.

There is a considerable sea export trade in cotton from Calcutta. The land imports into Calcutta are exclusively from the North-Western Provinces and the Punjab, and chiefly by the East Indian Railway.

The following statement shows the exports of raw cotton from Bengal to foreign countries:—

	1873-74.		1874-75.		1875-76.		1876-77.		1877-78.	
	Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.
To United Kingdom	75,060	17,21,817	102,700	22,47,856	54,657	11,27,810	100,551	34,17,902	23,068	5,26,843
„ Austria-Trieste	1,014	20,556	20,476	3,62,425	9,072	33,304	8,063	1,78,145	1,000	23,116
„ France ...	8,160	1,72,380	14,420	3,19,520	9,751	2,15,772	2,940	72,857	539	12,008
„ China-Hong-Kong	211,297	57,65,558	69,168	19,27,448	240,132	66,97,015	149,213	43,33,127	70,647	19,85,037
„ other countries	3,827	87,413	17,255	3,69,730	4,850	1,05,802	322	6,832	243	5,593
Total ...	209,348	77,67,725	224,019	52,36,991	310,465	81,69,703	311,125	80,08,861	95,596	25,52,597

The decrease in exports during 1877-78 was very great. The amount of exports from India depends to a great extent on the crop available for export from America, and the exports in 1877-78 were injuriously affected by the short crop in the North-Western Provinces and the consequent high prices in India. The severe famine in China doubtless affected the extent of the exports to that country.

The following figures will show the exports of raw cotton from Calcutta to Indian ports from 1872-73 to 1877-78:—

	1872-73. Cwt.	1873-74. Cwt.	1874-75. Cwt.	1875-76. Cwt.	1876-77. Cwt.	1877-78. Cwt.
Bombay	... 71½	...	...	...	...	2,280
Madras	... 13	33	...	...	80	...
British Burmah	... 989½	2½	65	6	1	77
Other Indian ports	192½	657	101	37	76	40½
Total	... 1,266½	692½	166½	43	157	2,761

The imports into Calcutta during 1877-78, the details of which are given in the chapter on trade, compared with the figures of the preceding year, are as follows:—

				Mds.
In 1876-77	...	...	...	6,25,203
In 1877-78	...	...	...	3,69,281

Of the total imports during the year under review 1,55,264 maunds came by sea; nearly 1,26,764 maunds from Bombay, 10,946 maunds from Madras, and 17,543 maunds from British Burmah, and the remainder from minor ports on the coast.

In 1875, at the instance of the Government of India, measures were set on foot for the collection of information as to the various kinds of dye drugs produced in the province. Reports have been received on the subject and forwarded to the Economic Museum, together with samples of dyes, and it is understood that a full report on the dyes of Bengal is being prepared.

The following is a brief account of the *Manufactures and Mines* of the several divisions of Bengal during the year under notice:—

The chief seats of the manufactures maintained by European capital are on the banks of the Hooghly, in the districts of Hooghly and Howrah; and the most important of these are the iron manufactures of Howrah, the jute and cotton mills of Bowrah and Fort Gloster, the paper mills of Bally, the jute mills of Champdani, and the mills at Serampore and Gyretty. In Howrah alone there are seven dockyards, besides numerous yards for building country-boats; three jute mills, each with a capital of 10 to 15 lakhs, and working altogether about 800 looms; eleven large workshops, besides the railway works. Altogether some 10,000 people are believed to find work daily in the factories and workshops of the town. As a natural consequence, the jute mills are driving hand-made gunny out of the market, and the cotton mills are seriously affecting the weavers, unless where some local peculiarity of manufacture meets a special native demand. But apart from this decline of the native cotton manufactures, there is still a large amount of indigenous manufacture. Throughout the district of Hooghly there is a large number of villages, each with a branch of industry peculiar to itself, but too insignificant to deserve separate notice; but these industries jointly contribute to impart to the district a certain character of industrial prosperity. Thus the lac manufactories in Paremba and Shahbazar supply lac bangles to every part of Bengal; brass and powder are made into domestic vessels in Bansberriah, Khanarpura, and Shahgunj; and paper is made by Mahomedans in many parts of the district.

The chief manufacture in the other districts of the division is silk. The past year was rather a better one for this industry than 1876-77.

In Midnapore Messrs. Watson and Messrs. Payen and Co. have extensive establishments. In Burdwan a certain amount of revival was apparent both in the silk and tusser markets; but in Bankoora and Beerbhoom the industry is said to be declining.

The business done at the pottery works of Ranigunge, belonging to Messrs. Burn and Company, is said to be rapidly extending. They employ now about 500 hands, and have large contracts for drainage pipes, fire-bricks, flooring tiles, and stone-ware of sorts. The workmanship is said to be excellent. An interesting sketch is given by the sub-divisional officer of Ranigunge of the coal mines of his sub-division, from which it appears that the year under report has been one of renewed prosperity to this industry. Of the success of the Bengal iron-works, so far as the production of iron goes, the Lieutenant-Governor has satisfied himself by personal inspection. The Susunia stone quarries in Bankoora are said to be now turning out an admirable quality of hard stone.

There is little new to add to the very full descriptions given of the manufactures of this division in the last year's report. The manufacture of indigo in Nuddea is becoming less profitable every year, and the plant will soon be grown only on *chur* lands. The crop seems too precarious for large capitalists. The cultivation of tobacco, on the other hand, is spreading. A new steam silk filature has been opened at Plassy. In Jessore the sugar manufacture increases, while indigo dwindles. Silk in Moorshedabad has again fallen back to a depressed condition.

There are 57 large silk filatures in Rajshahye and 100 small private looms: the large works employ 19,450 men and 500 women; the private looms about 3,000 persons. The annual outturn of silk is about 4,000 maunds. The past year was a better one for the trade than the year preceding, but the market had again become dull at its close. It is calculated that 80,000 acres are under mulberry in this district. There is still a little silk manufacture in Bogra, where 60 looms employ some 480 workmen. The area under indigo in Rajshahye was estimated for 1877-78 at 16,800 acres, and the outturn at 1,308 maunds. The relations of planters and ryots were satisfactory. In Pubna indigo seems to be dying out. The area cultivated last year was only 4,221 acres. In Rungpore the jotedars here and there cultivate the plant, the area taken up being about 13,300 acres, and the produce 1,669 maunds. The outturn of tea in Darjeeling last year was 4,946,630lb, as compared with 4,181,622lb in 1876-77. The number of gardens rose from 132 to 136. In the Western Dooars 12,732 acres have been already leased out for gardens, and 27 applications for grants are pending. The plant has only reached maturity in six gardens, over 303 acres, and the outturn was 33,119lb. The opening out of the trans-Teesta tract in the Dumsong sub-division will afford a fresh field for planting enterprise. Nearly all the cinchona now grown in the hills is on the Government gardens. The Serajgunge Jute Company turned out 96,000 maunds of gunnies from their mills last year, and in the Julpigoree district 1,600,000 bags were manufactured, the demand being great for the purposes of rice trade.

Rajshahye and Cooch
Behar Division.

The only noticeable matter under this heading is the development of the fish-curing trade at Goalundo. A special bonde^d enclosure has been formed, within which curing is carried on upon an improved system. From 1,362 maunds of fish in 1875 and 4,835 maunds in 1876 the outturn of the depôt rose to upwards of 11,000 maunds in 1877. In the year 1877, 28,502 maunds of salt fish were despatched by rail from Goalundo to Calcutta, and it is satisfactory to know that the Calcutta Health Officer considers the fish turned out from the curing depôt at Goalundo to be far superior to that cured on the old native method.

Dacca Division. There are no mines, though mineral soil is probably to be found in the Hill Tracts, as it has been already found in Arracan. The manufactures are few and of

Chittagong Division. no importance. As artisans the people of this part of Bengal are decidedly unskilful, though they are thought by the Collector of Noakholly to be improving. The carpenters in the island of Sundeeep are said to be tolerably expert at making European furniture—an art which they are supposed to have acquired from the Portuguese.

Improvements in the manufacture of sugar were effected during the year by Messrs. Thomson and Mylne, of Patna Division. Beheea, whose mills are now used by the natives, not only in Behar, but in Jessore and other parts of Bengal. In Chumparun Mr. J. M. Gibbon has started a tea garden on some small hills near Tribani, and put out some 40 acres of tea. The climate is, however, said to be there unhealthy for Europeans, and there is a difficulty from want of water.

Indigo still maintains its place as the chief manufacturing industry of the division. The excitement said to exist at the beginning of the year among the ryots in respect of the sowing of indigo has since subsided.

Bhagulpore Division.

The demand for stone from Monghyr and the Sonthal Pergunnahs is still on the increase, and the recent development of this industry is largely due to the return of the main stream of the Ganges to Rajmehal. In the latter district leases of hills in which it is proposed to form quarries have been taken by the Calcutta Municipality and the East Indian Railway. Slate quarries are worked to a small extent in Monghyr, and tale is found in the hills of the Jamoe sub-division and in the Sonthal Pergunnahs. But at present no one is disposed to invest money in working it, and it is believed that the market is fully supplied from the mica mines in the north of Hazareebagh. The export of hides from Putneah and of oil-seeds from Deoghur increased largely during the year. It is curious to note that native cloth merchants in Calcutta are adopting the system of selling on credit by means of travelling agents to consumers in the interior. These agents correspond very closely to the travelling drapers, who in the midland and other districts of England drive a considerable trade, and succeed in selling their goods at very high rates, payable generally by instalments.

Salt is the principal manufacture of Orissa. The annexed tables show the manufacture, import, sale, and stock of salt, and the salt revenue of the year, compared with the preceding one.

Orissa Division.

SALT REVENUE.

Total Receipts on account of Salt.

	CUTTACK.		POOREE.		BALASORE.	
	1876-77.	1877-78.	1876-77.	1877-78.	1876-77.	1877-78.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Proceeds from Government salt ...	.....	.....	.....	.....	.....	.....
Proceeds from imported salt ...	.....	.....	.....	.....	.....	3,171 0 0
Proceeds from excise salt ...	76,713 4 6	53,436 15 5	3,04,169 13 6	3,90,867 13 1	4,93,426 3 2	4,82,913 1 0
Golah rent ...	.....	.....	.....	.....	.....	.....
Rowannah fees ...	1,039 4 0	1,279 8 0	647 0 0	281 4 0	1,513 8 0	6,010 8 1
Miscellaneous ...	.....	.....	.....	1 5 0	623 11 11	.....
Total ...	77,752 8 6	54,716 7 5	3,04,816 13 6	3,91,150 6 1	4,95,563 7 1	4,92,094 9 1

Manufacture, Import, Sale, and Stock of Salt in Orissa.

	CUTTACK.		POOREE.		BALASORE.	
	1876-77.	1877-78.	1876-77.	1877-78.	1876-77.	1877-78.
	Mds. s. c.	Mds. s. c.	Mds. s. c.	Mds. s. c.	Mds. s. c.	Mds. s. c.
Stock of salt at the commencement of the year.	34,233 17 0	14,832 12 0	78,565 27 6	1,17,947 17 15	2,13,750 2 8	1,69,032 1 6
Total quantity imported and manufactured during the year, including surplus ...	10,043 10 0	10,996 15 0	2,33,060 28 8	47,839 12 0	1,31,739 36 10	1,00,118 23 0
Total ...	44,276 27 0	25,835 27 0	3,11,626 15 14	2,19,786 29 15	3,45,489 39 2	2,69,150 24 6
Deduct transferred to other districts	.....	.....	.....	.....	.....	.....
Balance ...	44,276 27 0	25,835 27 0	3,11,626 15 14	2,19,786 29 15	3,45,489 39 2	2,69,150 24 6
Add ditto from other districts ...	.....	.....	.....	.....	.....	.....
Total ...	44,276 27 0	25,835 27 0	3,14,726 15 14	2,19,786 29 15	3,45,489 39 2	2,69,150 24 6
Quantity sold or on which duty was paid during the year ...	28,169 20 0	18,843 2 0	1,83,303 25 0	1,70,669 0 0	1,61,446 31 7	1,58,362 25 12
Balance ...	16,107 7 0	6,993 25 0	1,78,323 30 14	49,117 29 15	1,84,043 7 11	1,10,797 38 10
Quantity written off during year on account of wastage ...	1,101 15 0	882 20 0	6,375 12 15	4,240 20 6	15,011 6 5	7,444 10 5
Balance ...	15,005 32 0	6,111 5 0	1,71,947 17 15	44,868 9 9	1,69,032 1 6	1,03,353 28 5
Deduct quantity given to fish contractor ...	50 0 0	.....	.....	.....	.....	.....
Balance ...	14,955 32 0	6,111 5 0	1,71,947 17 15	44,868 9 9	1,69,032 1 6	1,03,353 28 5
Deduct quantity found deficient on weightment at golah during the year ...	116 20 0	.....	.....	.....	.....	.....
Balance ...	14,839 12 0	6,111 5 0	1,71,947 17 15	44,868 9 9	1,69,032 1 6	1,03,353 28 5

NOTE.—Salt manufactured during the year ... Mds. s. c. 94,127 3 0
 Salt actually found out of 6,300 maunds imported from ... 5,991 20 0
 Coconada in Madras Presidency ...
 Total ... 1,00,118 23 0

In Cuttack, where the manufacture, as compared with the other two districts, is extremely small, 10,996 maunds were manufactured during the year, against 10,043 maunds of the previous year, showing an increase of 953 maunds, or 7·4 per cent.

In Pooree the outturn of manufacture during the year was 47,839 maunds, against 2,33,060 maunds of the previous year, showing a decrease of 1,85,221 maunds, which has been accounted for by the Collector thus: The season of 1876-77 was unusually favourable, and the molungees, who owed large sums of money to the manufacturers on account of previous years' advances, took advantage of the season and made large quantities of salt to relieve themselves from the liabilities to the manufacturers. But the case was quite different in 1877-78. The manufacturers began the year with an unsold stock of 1,71,947 maunds in their hands, and this quantity was more than what they actually sold in 1876-77—1,33,303 maunds 25 seers—and they had sustained great loss in the trade in previous years owing to the influx of Ganjam salt. They did not venture their capital in making more salt with less chance of selling it.

After it was made known that the duty on Ganjam salt had been increased, and the Government had also undertaken to pay the cost of establishment where the charge was not more than a fiftieth part of the duty to be obtained, licenses were taken out to manufacture 9,10,000 maunds of salt, of which 7,90,000 maunds were to be sun-dried and the rest boiled salt.

In Balasore the quantity of salt manufactured during the year amounted to 94,127 maunds, against 1,31,739 maunds of the previous year, showing a decrease of 37,612 maunds. The reason of the falling off was the failure of the manufacture of the salt year 1876-77. The failure of the manufacture of any given salt season affects the second of the two financial years over which the season extends to a larger extent, than it affects the first.

The sales amounted to 3,47,864 maunds, against 3,22,970 maunds in the previous year, showing a net increase of 24,874 maunds in the division. In detail there is a decrease in Cuttack and Balasore and an increase in Pooree. In Cuttack the decrease is attributable to the small stock in hand at the commencement of the year and the small manufacture.

In Pooree it was reported that the stocks in Ganjam and Cuttack had run short, and the traders, apprehending a general scarcity, made large purchases with a view to keep sufficient stocks in their hands: hence the increase in Pooree is greatly the result of the decrease in Cuttack.

The decrease in the sales of salt in Balasore was, the Collector reports, owing to the importation of Liverpool salt.

The manufacture of gold and silver filigree works is carried on by the goldsmiths of Cuttack as heretofore.

There are no mines in the division.

There are no manufactures of any importance in Chota Nagpore.

Chota Nagpore Division. Coarse cloth and brass and earthenware utensils and agricultural implements are made for local use, and there is a small export of tusser silk from Manbhoom. There

are several lac factories in Manbhoom; the palas and kussum trees, both of which yield lac in large quantities, being very abundant in the district. The industry is, however, a declining one, and the large lac factory at Dorundah in Lohardugga has this year been forced to suspend operations. Coal is found in each of the districts of the division, but the mines of Singbhoom and Lohardugga were not worked during the year. There are seven coal mines in the Pachumba sub-division of Hazareebagh, but in only four were operations carried on, and of these by far the most important is the Kurhurbari mine leased by the East Indian Railway Company from Government. The average number of men employed in this mine during the year was 4,500, and the yield of the year was 308,386 tons. The shafts are for the most part shallow, and entirely free from damp, and torches are used by the miners at their work. The fields of Raneegunge extend some few miles west of the Burrakuru river. Mica appears to have worked at a profit in the Hazareebagh district, but no successful attempt has been made in recent years to work the copper mines of Singbhoom and Hazareebagh.

It is interesting to note that in Palamow the local sugar manufacturers are using extensively the hand-mills patented by Messrs. Thomson and Milne of Behar, and that this industry shows signs of a rapid increase.

Tea cultivation appears to have been lately much extended in the Lohardugga district. The last two seasons have suited the tea-planter exactly, the older concerns have shown good returns, and ten new gardens have been recently opened out.

Although the progress of the cinchona plantations in the Darjeeling district has for some years been considerable, the results of the past year are better than any which have hitherto been attained. These plantations consist of two parts—an older portion lying in the valley of the Rungjo, and a newer portion begun only three years ago on the Sitong Spur and the adjacent valley of the Ryang. Both are, however, under one management.

Cinchona.

With the view of practically testing the cost at which, with the experience which has now been accumulated by the officers in charge, this valuable medicinal tree can be grown, the accounts of the younger plantation have from its commencement been kept distinct. The Sitong plantation has during the year been extended by 152 acres at a cost of Rs. 10,212. The total area of this plantation has been thus brought up to 242 acres. It is as yet too young to yield a crop.

On the older plantation 97 acres of new ground have been planted out, and its area has thus been brought up to nearly 2,000 acres. The total working expenses for the year amounted to Rs. 57,738, against which has to be set a crop of bark amounting to 344,225lb, the whole of which has been made over to the Quinologist. The bark yielded in former years amounted to 529,017lb, so that there has been taken from these plantations since their commencement no less than 873,242lb of dry bark, and there does not appear to be any reasonable doubt that an annual yield of from 300,000 to 400,040lb may be counted on.

The species under cultivation being chiefly *C. Succirubra*, produce has hitherto consisted, and for some time must mainly consist, of red bark—a sort which, though rich in its total yield of alkaloids, is, by comparison with yellow bark, poor, in quinine. Efforts, however, have steadily been made to increase the cultivation of the yellow bark tree (*C. Calisaya*), but owing to the difficulty of propagating the best varieties of this species progress has been, and apparently must continue to be, slow.

The manufactures of “cinchona febrifuge” from the red bark yielded by these plantations has now become one of some practical importance. During the past year this preparation has been largely employed in substitution for quinine in all the Government hospitals and dispensaries throughout the presidency, and a saving of from two to three lakhs of rupees has thereby resulted. About 2,000lb have in addition been sold to the public, for which the sum of Rs. 35,000 has been received.

Cinchona febrifuge, as issued by the Government Quinologist, is in the form of a white, or nearly white, powder, and contains the alkaloids naturally present in the bark of *C. Succirubra*, namely, quinine, cinchonidine, cinchonine, quinamine, and the substance or substances known as amorphous alkaloid. Although quinine is the best known of these, it has been fully proved that the others possess in a greater or less degree the same febrifugal properties. The early trials of this preparation by Drs. Chevers, Ewart, Bird, and French gave results that were entirely favourable to it; but experiments which followed by other officers led to some variety of opinion, and while many pronounced it as useful as quinine, it was considered by others to produce an undue amount of nausea and sickness. Further experience, however, tended to confirm the favourable view of its efficacy, and at the beginning of the last financial year Dr. Beatson, the Surgeon-General, in a circular memorandum stated that the extensive experiments carried out during the previous autumn in every circle of the presidency had left no shadow of doubt of its being a perfectly safe and efficient substitute for quinine in all cases of ordinary intermittent fever. He accordingly ordered that in all indents of officers attached to native military charges three-fourths of the sanctioned amount of quinine should be replaced by cinchona febrifuge. On his recommendation this Government adopted the same course for all civil hospitals and dispensaries under its control. The result has been perfectly satisfactory, and by thus reducing the expenditure of quinine to one-fourth the large saving already referred to has been effected.

At the same time, in consequence of the objection which some officers had at first made to this preparation, namely, that it occasionally produced disagreeable nausea, a committee was appointed, consisting of Dr. King, the Superintendent of the Botanical Gardens, Dr. McConnel of the Medical College Hospital, Dr. Raye of the General Hospital, and Mr. Wood, Quinologist, to ascertain whether the febrifuge would be improved by eliminating any of its constituents. This committee has not yet concluded its investigations.

At the end of 1876 sanction was given for the sale of febrifuge to the general public, and Dr. King undertook to issue it from his office at the Botanical Gardens. The medicine was advertised in several newspapers, and also in some local Government gazettes. It naturally takes a little time for a new remedy to make its way, or even to become known. Repeated demands have, however, been received, not from Bengal only, but from all parts of the three presidencies, and from Native States. A good deal has been disposed of to Government officials in the Punjab, Central, and North-West Provinces, to planters and other employers of labour in Bengal, Assam, and Travancore, and to medical missionaries all over the country. Druggists in Calcutta and Bombay, both Native and European, and private medical practitioners, have also made purchases in some quantity. It is believed that progress has thus been made in putting this remedy within the reach of the poor, who are the chief sufferers from the commonest of tropical diseases.

The manufacture of the febrifuge is still conducted in the temporary factory at Mongpoo, under the personal supervision of Mr. Gammie and the general control of the Quinologist. The quantity made during the past year was 5,162lb, and the total amount issued since the factory was started is 10,901lb. The cost of production last year, exclusive of the price of the bark, was Rs. 4-1-1½ per lb. This, however, includes the cost of erecting a brick drying-house and the selling charges. If these be deducted, the actual manufacturing expenses are only Rs. 3-3-2½ per lb.

The expenditure on the plantations last year (excluding the Sitong section) was Rs. 57,898-8-9, and the Quinologist's expenditure was Rs. 27,641-5-8, making a total of Rs. 85,539-14-5. The revenue derived from the sale of febrifuge to the public was Rs. 35,193-4, and the amount debited against the Medical Departments of Bengal and Bombay for febrifuge and bark supplied was Rs. 61,876-13, making a total revenue of Rs. 97,070-1. The excess of receipts over expenditure was therefore Rs. 11,530-2-7. As this is the first year in which the febrifuge entered into general use by the Government or the public, the financial result may be regarded as satisfactory. There can be no doubt that the consumption of the febrifuge will rapidly increase, and when it reaches about 8,000lb a year the Quinologist calculates that the profit (which represents interest on capital) will amount to Rs. 40,000 per annum.

Trade.

Trade of Bengal.—Excluding Government transactions, the total value of the imports by sea into the Lower Provinces during the last five years is as follows:—

Imports.

				1873-74.	1874-75.	1875-76.	1876-77.	1877-78.
FOREIGN TRADE.				Rs.	Rs.	Rs.	Rs.	Rs.
Merchandise	...	{	Free	1,51,58,442	2,66,01,675	1,15,96,265	1,01,14,057	1,00,49,706
			Dutiable	14,62,62,281	17,15,56,388	16,00,75,181	15,68,24,071	18,38,04,690
			Total ...	16,14,20,723	19,81,58,063	17,76,71,746	16,69,38,128	19,38,54,456
Treasure	...	...	...	1,94,58,107	2,88,77,281	1,08,05,151	2,62,51,665	4,96,13,992
Total Foreign Trade				18,08,78,830	22,70,35,344	18,84,77,197	19,31,92,793	24,34,68,448
COASTING TRADE.								
Merchandise	...	{	Foreign	16,39,567	18,00,653	47,47,791	47,94,205	61,99,314
			Indian	97,04,906	2,64,78,331	1,70,78,785	1,77,84,841	2,16,76,779
			Total ...	1,13,44,472	2,82,78,984	2,18,26,576	2,25,79,046	2,78,76,093
Treasure	...	...	...	85,32,119	61,26,182	25,86,718	57,00,143	96,63,333
Total Coasting Trade				1,98,76,591	3,44,05,166	2,44,13,294	2,82,79,189	3,75,39,426
Grand Total of Foreign and Coasting trade				20,07,55,421	26,14,40,510	21,28,90,491	22,14,71,982	28,10,07,874

Under the head of foreign trade the imports of merchandise rose in value from Rs. 16,69,38,128 in 1876-77 to Rs. 19,38,54,456 in the past year, being an increase of more than two crores and a half. The imports of treasure also increased to nearly five crores, against two crores and three-fifths in the previous year. In the coasting trade the imports of merchandise rose from Rs. 2,25,79,046 to Rs. 2,78,76,093, and those of treasure from Rs. 57,00,143 to Rs. 96,63,333. Taking foreign and coasting trade together, and including treasure, the imports into Bengal rose from Rs. 22,14,71,982 to Rs. 28,10,07,874.

The exports from the Lower Provinces during the last five years, were as follow:—

Exports.

	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.
	Rs.	Rs.	Rs.	Rs.	Rs.
FOREIGN TRADE.					
Merchandise { Free ...	18,69,96,226	18,87,93,505	17,80,56,491	21,45,47,391	24,99,48,689
Indian produce ... { Dutiable ...	7,39,21,402	6,91,02,789	5,83,39,260	4,99,19,091	6,07,38,443
Total	26,00,17,628	25,78,96,394	23,63,95,751	26,44,66,482	31,06,87,132
Re-export of foreign goods	1,53,08,126	1,63,30,905	10,74,845	1,93,702	15,21,008
Total Merchandise	27,53,25,754	27,42,26,999	23,74,70,596	26,59,60,184	31,22,08,140
Treasure	42,30,913	75,31,700	74,59,428	10,38,308	4,47,096
Total Foreign Trade	27,95,56,667	28,18,08,699	24,49,30,024	26,69,98,492	31,26,55,236
COASTING TRADE.					
Merchandise { Foreign ...	1,87,80,778	2,00,84,926	1,90,59,035	2,31,95,181	2,21,08,213
... { Indian ...	3,47,65,535	4,03,70,642	3,11,97,334	7,23,06,908	10,85,12,939
Total	5,35,46,313	6,04,55,568	5,02,56,369	9,55,02,089	13,07,11,152
Treasure	1,53,66,602	74,40,377	75,92,441	2,15,87,290	2,66,35,774
Total Coasting Trade	6,89,12,915	6,78,95,945	5,78,48,810	11,70,89,379	15,73,46,926
Grand Total of Foreign and Coasting trade	34,84,69,582	34,97,04,644	30,27,78,834	38,40,87,871	47,00,02,162

The exports of merchandise in the foreign trade increased in value from Rs. 26,44,66,482 to Rs. 31,06,87,132, while the exports of treasure fell from Rs. 10,38,308 to Rs. 4,47,096. In the coasting trade the exports of merchandise rose from Rs. 9,55,02,089 to Rs. 13,07,11,152, and the exports of treasure from Rs. 2,15,87,290 to Rs. 2,66,35,774. Including both foreign and coasting trade, the total value of the exports from Bengal rose from Rs. 38,40,87,871 to Rs. 47,00,02,162.

Adding together the totals of both export and import trade, it will be seen that the value of the trade of the Bengal presidency rose from Rs. 60,55,59,853 in 1876-77 to Rs. 75,10,10,036 in 1877-78, an increase of nearly fifteen crores, or 24 per cent., against nine crores, or 17.43 per cent., in the previous year. These figures are inclusive of treasure, but do not include Government transactions.

THE PORT OF CALCUTTA.

The following table shows the total imports and exports on behalf of Government at Calcutta during the last five years:—

	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.
	Rs.	Rs.	Rs.	Rs.	Rs.
IMPORTS.					
From foreign countries—					
Stores ...	63,07,053	64,33,251	55,14,772	64,20,772	44,70,790
Treasure ...	.....	.....	.....	.....	.....
Total	63,07,053	64,33,251	55,14,772	64,20,772	44,70,790
EXPORTS.					
To foreign countries—					
Stores { Foreign ...	1,44,413	1,07,504	18,110	15,866	1,09,864
... { Indian ...	.....	2,80,093	1,49,675	1,88,529	1,10,870
Treasure ...	.....	.....	461	.....	.....
Total	1,44,413	3,87,597	1,68,246	2,04,395	2,20,734

There was a decrease in the value of the imports of Rs. 19,49,982, and an increase in the value of the exports amounting to Rs. 22,339. The importation of arms and ammunition was reduced by six lakhs; that of metal, railway plant, and paper by four lakhs; of hardware and cutlery by three lakhs; and of stationery by two lakhs. The effect of these reductions was, however, counteracted to some extent by an increase of five lakhs in the imports of boots and shoes, of three lakhs and a half in woollen goods, and of two lakhs in ale, beer, and porter. Nearly the whole of these imports were received from the United Kingdom. Under the head of exports, which consist for the most part of copper coin sent to Ceylon and the Straits Settlements, the increase was trifling.

Excluding Government transactions, the fluctuations in which have been noticed in the foregoing paragraph, the Foreign trade of Calcutta, the value of the foreign trade of Calcutta, both in exports and imports, during the last five years was as follows:—

	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1877-78 compared with 1876-77.	
						Increase.	Decrease.
IMPORTS.							
Merchandise—	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Free	1,15,40,062	1,11,22,596	1,15,88,266	1,01,03,103	1,00,48,217	.....	54,886
Dutiable	13,73,52,138	16,20,23,782	16,58,10,554	15,65,71,144	18,36,77,552	2,70,06,408	.....
Total	14,88,92,200	17,32,16,378	17,73,98,820	16,61,74,247	19,36,25,769	2,69,51,522	.....
Treasure	1,04,46,607	2,38,77,281	1,08,03,751	2,62,54,665	4,96,03,092	2,33,48,327	.....
Total Imports ...	16,83,38,807	20,20,93,659	18,82,02,571	19,29,28,912	24,32,29,761	5,03,00,849	.....
EXPORTS.							
Merchandise—							
Indian { Free	16,33,32,898	16,03,19,401	17,80,03,880	21,45,01,114	24,91,88,917	3,46,87,803	.....
{ Dutiable	6,00,06,060	5,54,24,194	5,65,90,748	4,85,40,138	5,92,60,114	1,07,19,976	.....
Total	22,34,28,958	21,57,43,685	23,45,94,628	26,30,41,252	30,84,49,031	4,54,07,779	.....
Foreign merchandise	11,42,106	12,54,552	10,70,062	14,93,562	15,20,953	27,391	.....
Total • merchandise ...	22,45,71,064	21,69,98,237	23,55,74,690	26,45,34,814	30,99,69,984	4,54,35,170	.....
Treasure	42,30,913	75,81,700	74,59,428	10,35,308	4,47,096	.....	5,91,212
Total Exports ...	22,88,01,977	22,45,79,937	24,30,34,118	26,55,73,122	31,04,17,080	4,48,43,958	.....

The imports of merchandise into Calcutta during 1877-78 were valued at Rs. 19,36,25,769, against Rs. 16,66,74,247 in the preceding

year, being an increase of Rs. 2,69,51,522. By far the larger proportion of this enormous rise in the imports consisted of shipments from the United Kingdom of cotton twist and manufactured goods, valued at 218 lakhs. Among other articles, of which the import rose less conspicuously, may be mentioned liquors, metals, mineral oil, silk—both raw and manufactured, umbrellas, drugs and spices, provisions, apparel, and woollen goods. On the other hand there was a decline of twelve lakhs in the import of railway plant and rolling-stock, of five lakhs in salt, and of two lakhs and a half in China tea.

A very remarkable rise occurred in the imports of treasure, which increased from Rs. 2,62,54,665 to Rs. 4,96,03,992. The imports of gold advanced by twenty-four lakhs, and those of silver by two hundred and nine lakhs. The exceptionally large import of silver is stated to have been due to the suspension of the Secretary of State's drawings upon India during the period when silver was required here to lay down grain for shipment to Europe and to pay for the crops of jute and indigo. Taking treasure and merchandise together, it will be seen that the imports of the foreign trade amounted to Rs. 24,32,29,761—an increase of more than five crores over the imports of the previous year, and of more than four crores over those of 1874-75, when the imports stood higher than at any other time during the last five years.

Almost equally remarkable is the stimulus which was felt in the export trade. The value of the merchandise exported from Calcutta amounted to Rs. 30,99,69,984, against Rs. 26,45,34,814 in the previous year, showing an increase of more than four crores and a half. This increase consisted chiefly of larger shipments of seeds, wheat, rice, jute, indigo, tea, opium, and hides. There was a decline of fifty-five lakhs in the exports of raw cotton, and the trade in sugar, lac, raw silk, and piece-goods also fell appreciably.

The statement below shows the proportion in which the foreign trade of Calcutta is divided between the various countries with which commercial relations are maintained:—

Trade with foreign countries.

				Percentage in—		
				1875-76.	1876-77.	1877-78
United Kingdom	...	...	...	63.59	64.72	65.66
China—Hong-Kong	...	...	...	12.73	12.43	11.07
Ditto—Treaty Ports	...	...	...	1.48	1.00	1.53
France	...	...	...	3.30	3.61	4.17
Straits Settlements	...	...	...	4.92	4.14	3.87
United States	...	...	...	4.14	4.26	3.79
Ceylon	...	...	...	2.41	2.36	2.74
Mauritius	...	...	...	1.48	1.80	1.72
Australia	...	...	...	1.34	1.17	1.40
Italy	...	...	...	1.41	1.44	1.34
Austria	...	...	...	0.75	0.71	0.55
Other countries	...	...	...	2.36	2.27	2.23

The trade with the United Kingdom amounts to almost two-thirds, and that with the United Kingdom and China together to over three-fourths of the whole trade of the port. The trade with the United Kingdom showed an increase of 385 lakhs in imports and 278 lakhs in exports. Of the increase in imports, nearly 143 lakhs were treasure and 218 lakhs cotton goods. In the trade with China the most marked feature in the year's operations was the increased export of opium, amounting in value to 35 lakhs over that of the preceding year. The imports of tea have fallen by nearly one-half. The trade with the Straits Settlements also increased by 25 lakhs, or 13 per cent.; the imports of treasure and merchandise having risen by 11, and 8 lakhs respectively, while exports also advanced, chiefly under the head of jute bags, precious stones, and pearls. The trade with the United States is mainly in exports, which are valued at 192 lakhs, against 14 lakhs of imports. The export of indigo, raw hides, jute, and sugar increased during the year, as also did the import of kerosine oil. The Ceylon trade is also chiefly in exports, and the value of these rose by 44 lakhs on the whole, of which 41 lakhs were due to larger shipments of rice. Similarly, the exports of Indian produce to the Mauritius rose by 15 lakhs to meet the growing wants of the Indian immigrants in that island. The trade with Australia grew 45 per cent during the year, the imports rising by ten lakhs, half of which was in treasure; and the exports by 14 lakhs, mainly in jute bags and castor-oil. The trade with Italy also improved by about three and a half lakhs under imports and four lakhs under exports.

On the other hand the trade with Austria declined during the past year. This, however, is a matter of trivial importance, as the value of the entire trade, both import and export, did not much exceed thirty lakhs. The trade with France still maintains a steady rate of increase. Imports from that country have risen by five lakhs, and exports by nearly sixty lakhs. The increase in the former was due partly to shipments of silver, and partly to the extended import of silk piece goods. Under the head of exports there was an increase of fifty-seven lakhs under indigo, of eighteen lakhs in oil-seeds, and one lakh in woollen shawls. This important growth of exportation to France arises from the development of the direct trade with that country through the Suez Canal. The proportion of the foreign trade of Calcutta following this route rose during the past year to 52 per cent. It will appear from the following statement that with the exception of a trifling decline in 1875-76 the trade passing through the Canal has steadily increased in value :—

			Imports.	Exports.	Total.
			Rs.	Rs.	Rs.
1871-72	...	...	9,09,46,164	5,45,47,715	14,54,93,879
1872-73	...	...	10,55,11,198	6,03,99,996	16,59,11,134
1873-74	...	...	12,12,43,365	8,23,73,224	20,36,16,589
1874-75	...	...	15,11,53,875	7,44,70,398	22,56,24,073
1875-76	...	...	13,80,21,599	8,63,69,364	22,43,90,963
1876-77	...	...	14,66,76,481	9,20,09,891	23,76,86,362
1877-78	...	...	18,38,27,054	10,42,01,939	28,80,28,993

Import Trade.—The imports of agricultural implements amounted to Rs. 3,36,197, against Rs. 2,46,882 in the previous year. They did not, however, reach the amount recorded in 1874-75. The continual extension of tea gardens, and the increasing use of machinery in the manufacture of indigo, are supposed to account for the enhanced imports of the past year.

Apparel.

Apparel shows a rise of value from Rs. 17,71,633 to Rs. 19,44,069.

Coal.

The imports of coal rose from 77,375 tons, valued at Rs. 14,31,348, to 80,703 tons, valued at Rs. 13,07,504.

Cotton twist and piece-goods.

The following statement illustrates the course of trade in cotton twist and yarn and cotton piece-goods during the last five years:—

Cotton Twist and Yarn.

	1873-74.		1874-75.		1875-76	
	lb	Rs.	lb	Rs.	lb	Rs.
Grey and white	7,718,077	57,25,821	11,012,888	79,63,893	8,238,101	57,94,515
Turkey red	1,146,056	15,71,156	1,707,046	23,38,996	2,274,192	32,94,264
Other colours	1,553,340	14,51,581	1,728,436	16,27,813	1,591,591	13,54,913
Total	10,417,473	87,48,558	14,449,370	1,19,30,702	12,103,884	1,04,43,692

	1876-77.		1877-78.	
	lb	Rs.	lb	Rs.
Grey and white	8,603,144	60,94,187	10,552,913	69,84,919
			Price 19,000	9,350
Turkey red	2,301,228	31,62,265	2,568,312	33,25,269
Other colours	1,646,977	12,99,160	1,842,792	14,45,550
Total	12,551,349	1,05,55,552	14,982,137	1,17,65,699

Cotton Piece-goods and other manufactures.

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		1873-74.		1874-75.		1875-76.		1876-77.		1877-78.	
		Yds.	Rs.	Yds.	Rs.	Yds.	Rs.	Yds.	Rs.	Yds.	Rs.
Grey piece-goods—											
British	530,537,576	7,06,49,427	540,964,790	6,38,03,461	719,010,990	8,24,43,891	
American	227,077	42,052	1,683,527	3,70,252	1,277,742	2,35,823	
Total	5,39,03,307	.....	5,37,51,474	550,764,653	7,05,92,359	542,648,617	6,38,79,749	710,288,732	8,26,79,716
White piece-goods—											
British	119,332,439	1,62,73,449	113,632,849	1,59,06,074	135,586,493	1,76,15,399	
French	1,77,43,829	.....	1,71,40,964	663,600	1,51,734	236,994	99,155	170,507	83,011
American	13,233	3,096	2,152	754	
Total	1,77,43,829	.....	1,71,40,964	111,021,018	1,64,10,232	113,903,676	1,60,68,225	135,759,147	1,76,99,624
Coloured, printed, or dyed piece-goods		94,08,937	.....	1,07,39,592	85,198,256	1,49,66,968	77,200,503	1,26,46,199	84,646,791	1,22,34,202
Other cotton goods		1,76,429	.....	2,17,398	.....	14,92,022	.....	9,90,294	.....	16,00,618
Grand total of cotton manufactures		8,62,97,882	.....	10,57,59,738	.....	10,34,61,221	.....	9,38,74,448	.....	11,42,74,100

The striking increase in the imports of cotton goods of all classes is attributed to over-trading. It is stated that in the absence of an effective demand from other consuming countries shipments were made to India on a much larger scale than the country could fairly absorb. A considerable decline is therefore anticipated in the imports during next year, and the following figures have been cited in support of this view:—

	FROM APRIL 1877 TO JULY 1877.		FROM APRIL 1878 TO JULY 1878.	
	Quantities.	Value.	Quantities.	Value.
	lb.	Rs.	lb.	Rs.
Cotton—				
Twist and yarn	5,832,182	45,61,505	5,135,750	37,56,701
Piece-goods—	Yds.		Yds.	
Grey	220,967,385	2,57,91,317	188,896,448	2,06,87,978
White	43,679,526	57,98,319	39,634,701	48,13,533
Coloured	21,189,177	31,71,341	21,532,879	33,09,626
Total ...	2,85,735,588	3,17,60,977	250,064,026	2,88,11,137

The import of drugs and medicines has risen in value from Rs. 10,29,163 to Rs. 14,84,287. Quinine shows a remarkable rise in price, the value having advanced from Rs. 2,89,890 to Rs. 5,48,404, while the quantity imported increased only from 3,844 pounds to 3,890 pounds. This is stated to be due to the demand for quinine for the Turko-Russian war, and to disturbances in Peru, which interfered with the transport of bark to the coast.

Liquors and wines.

The following statement shows the importation of malt liquors, spirits, and wines during the last five years:—

	Ale, beer, and porter.	Spirits.	Wines and liqueurs.
	Rs.	Rs.	Rs.
1873-74	15,47,688	20,51,320	21,89,195
1874-75	15,92,848	27,22,377	24,05,564
1875-76	12,57,721	20,80,825	25,49,795
1876-77	12,80,994	23,61,694	19,55,127
1877-78	15,63,875	30,20,246	21,36,373

There has been a slight increase under the head of ale, beer, and porter, and a considerable increase under that of spirits. The imports of wine and liqueurs also seem to be returning to the level at which they stood in former years.

Machinery and mill-work.

The imports of machinery and mill-work during the last five years may be shown as follow:—

	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.
	Rs.	Rs.	Rs.	Rs.	Rs.
Steam engines and parts thereof ...	48,79,139	47,71,975	26,61,359	3,60,750	3,33,420
Other sorts of machinery ...	...	...	25,46,235	26,12,546	27,30,806
Total ...	48,79,139	47,71,975	52,07,594	29,73,296	30,64,226

It will be observed that although there was a slight increase in the past year the imports were still far below the level they attained in 1875-76. This, however, is precisely the state of things which might be expected to follow on the large extension of the jute manufacturing industry which took place in the years preceding 1875-76.

Metals of all kinds, except quicksilver and steel, show an increase in quantity, and all except iron have increased in value. Copper has risen from 148,134 cwt., valued at Rs. 77,22,652, to 175,110 cwt., valued at Rs. 84,75,653. This is said to be due to speculative shipments in the hope of a rise of prices, which has not occurred. Iron has risen from 932,208 cwt., valued at Rs. 63,32,073, to 1,022,449 cwt., valued at Rs. 60,30,451. The decline in value is remarkable. It is explained that Belgian manufacturers are now turning out large quantities of iron at cheap rates, and that this iron has been largely imported into Calcutta *via* England. Many kinds of coarse native manufactures do not require iron of very superior quality, and the cheap iron manufactured in Belgium meets a demand which is very likely to increase. Apart, however, from this special influence, the general cheapness of metals has combined with low rates of freight from England to raise the imports from Rs. 1,79,53,108 to Rs. 1,87,01,906.

The imports of mineral oil during the last five years have been as follow:—

	1873-74.		1874-75.		1875-76.		1876-77.		1877-78.	
	Gals.	Rs.	Gals.	Rs.	Gals.	Rs.	Gals.	Rs.	Gals.	Rs.
United Kingdom	...	32,370	...	13,277	2,685	3,760	17,201	22,076	80,699	57,404
United States	64,681	...	4,52,595	211,516	1,28,169	178,758	1,62,415	969,167	8,11,859
Java	101,900	71,399
Straits Settlements	13,090	9,750	2,375	2,970	90,942	84,025
Other foreign countries	...	27,063	...	150	54	34	.....	.....	.....	.....
Total	...	1,24,019	...	4,66,022	227,235	1,41,701	198,334	1,87,461	1,242,708	10,24,687

* Quantities not available.

It is explained that the increase observable in the imports of kerosene oil is due to the collapse of a strong combination of oil merchants in America, which controlled the markets and prevented shipments abroad. As

Mineral oil.

soon as the combination was broken up, prices fell in America and elsewhere, and large supplies were poured into Calcutta, not only from America, but from Singapore, Batavia, and Bombay, to which ports excessive shipments had been made. In consequence of the increase of the supply from America, the imports of British Burmah oil have declined, that oil being unable to compete with the cheaper and purer American product.

The imports of cigars have fallen from 86,613lb, valued at Rs. 2,12,874, to 77,947lb, valued at Rs. 2,35,090.

Cigars and tobacco.

This is due to diminished receipts from China and the Straits Settlements, whence nearly all the imports of Manilla cigars are received. The increase in value is accounted for by the fact that the price of Manilla cigars has risen, and that expensive cigars have been more largely imported from the United Kingdom. The decline in the Manilla trade is ascribed to the improvement of the tobacco cultivated in Rungpore and certain other districts of Bengal, as well as in Madras and Burmah. There can be no doubt that the marked improvements which have been introduced of late years into the manufacture of cigars in Madras and Burmah have tended to decrease the demand for Manillas; and now that the price of the latter has risen, Indian cigars will probably be still more largely used. A decline has also occurred in the imports of manufactured tobacco other than cigars, which have fallen from 447,042lb, valued at Rs. 2,75,673, to 353,389lb, valued at Rs. 2,03,886. This is doubtless due to increased consumption of country tobacco in the shape of cigars.

Export trade.—Re-exports of foreign merchandise form a comparatively small proportion of the export trade. The following statement shows the value of the re-exports of foreign goods from Calcutta during the

last five years :—

		Rs.			Rs.	
1873-74	...	11,42,086	..	1876-77	...	14,93,562
1874-75	...	12,51,552				
1875-76	...	10,70,062		1877-78	...	15,20,953

This branch of the export trade seems to be growing, though it is still three lakhs less in value than it was in 1872-73. The articles re-exported were chiefly apparel and cloths to the Straits Settlements, drugs to the United Kingdom, and cotton goods to Mauritius and Ceylon.

Under the general head of dyeing and colouring materials by far the most important is indigo, the exports of which during the last five years may be shown as follows :—

Exports of Indian produce. Dyeing and colouring materials.

		Cwt.	Mds.	Value.	Average value per maund.
				Rs.	Rs.
1873-74	...	73,705	1,00,321	2,62,80,103	262
1874-75	...	51,428	74,083	1,98,16,099	267
1875-76	...	84,228	1,14,644	2,35,25,774	205
1876-77	...	69,379	94,433	2,35,66,023	250
1877-78	...	99,402	1,35,297	3,04,37,068	225

An unusually favourable season in Tirhoot and a moderate outturn in Bengal raised the quantity of indigo exported by nearly 43 per cent. This large production of itself tended to lower the price, while the uncertain condition of European politics weakened the regular demand for the dye, so that the average price obtained for the crop of 1877-78 was about 10 per cent. less than in the previous year. The increased export, however, was widely distributed. Egypt consumed seven times the quantity exported to that country in 1876-77; the demand from the United States rose by 59 per cent.; and France, Persia, and Turkey doubled their consumption. In the case of France the large apparent increase is probably due not so much to larger consumption as to a change in the mode of supply, indigo being now sent direct by the Suez Canal instead of being obtained by French merchants from England. It may be observed that the total export of indigo during the past year considerably exceeds that of any of the preceding five years, and is nearly 25,000 cwt. above the average export of the last thirty years. Ever since the aniline dyes entered so successfully into competition with lac-dye as almost to drive the latter out of the market, some anxiety has been felt as to the possibility of a similar fate overtaking the manufacture of indigo. An eminent chemist in Munich has now succeeded in producing the colouring principle of indigo by a chemical process; but it is understood that this method, unlike that employed in the case of the aniline dyes, is far too elaborate and expensive to be adapted to economic requirements.

The export of myrabolams for dying and tanning purposes rose from 24,313 cwt. to 105,113 cwt., owing apparently to the derangement of the Russian trade in bark and acorn crops. The trade in safflower has been almost killed by the use of aniline dyes, but turmeric, on the other hand, shows an annually increasing demand.

Two sets of powerful influences at home and abroad combined during the past year to stimulate the export of the important staples comprised under the heading of grain and pulse,—the famine in Madras and the war between Turkey and Russia. It is true that the most conspicuous effects of the Madras famine upon the exports for Calcutta were produced in the coasting trade, but it also exercised a considerable influence on the foreign exports. By virtually closing the Black Sea ports and cutting off one of the main sources of the wheat supply of Europe the war in Turkey had a direct tendency to increase the exports of wheat from India.

Turning to the detailed statistics recorded under the head of grain and pulse, it appears that the exports of gram rose from 238,293 cwt., valued at Rs. 6,42,737, to 361,563 cwt., valued at Rs. 12,53,920. Most of this was sent to Mauritius for the use of the large coolie population in that island, and a fair proportion also went to Ceylon. The exports of paddy, or unhusked rice, amounted to 40,602 cwt., valued at Rs. 1,12,620, against 672 cwt., valued at Rs. 1,189, in the previous year. Nearly all of this unusually large export was shipped to Ceylon, the demand for cleaned rice in India being so great that the unhusked

article was exported. The exports of husked rice during the last five years were as follow:—

			Cwt.	Rs.
1873-74	...	...	3,637,611	1,35,22,900
1874-75	...	...	2,724,232	1,04,85,569
1875-76	...	...	3,873,854	1,34,67,712
1876-77	...	...	5,243,704	1,99,88,737
1877-78	...	...	5,526,053	2,54,10,090

The increase in quantity during the past year was not very striking, but the heavy local demand enormously enhanced the price. Nearly half of the exports were taken by Ceylon, the demand from which country has risen very remarkably in the last two years, as is shown by the following statement of the exports to Ceylon during the last five years:—

			Cwt.	Rs.
1873-74	...	...	409,438	12,86,418
1874-75	...	...	94,121	3,31,144
1875-76	...	...	402,321	12,66,872
1876-77	...	...	2,167,837	76,32,597
1877-78	...	...	2,547,202	1,17,72,615

About one-fourth of the total exports from Calcutta is also sent to Mauritius for the use of the coolie population there. On the other hand the exports to the United Kingdom and South America appear to be declining.

Attention was drawn last year to the increased exports of wheat, which seemed to promise a permanent extension of the Indian wheat trade. The exports of the last five years are shown thus:—

1873-74.		1874-75.		1875-76.		1876-77.		1877-78.	
Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.
489,443	18,84,748	279,280	11,89,013	1,330,821	39,89,703	3,882,218	1,23,76,374	4,544,392	1,91,13,084

It can hardly be expected that this remarkable development will be permanent.

The enormous exports of last year have exhausted the reserve stocks in Northern India, and the crop of the present year is said to be deficient. At the same time it is satisfactory to find that although the grain of Indian wheat is small, it is considered to yield flour of superior quality, and that mill machinery is being adapted to suit its requirements. About one-half of the export in the past year went through the Suez Canal, and arrived in much better condition than that sent round the Cape. It has hitherto been believed that one of the main

obstacles to the growth of the Indian trade in wheat is the liability of *the grain to be weevil-eaten during the voyage round the Cape; but this danger seems to have been much exaggerated, and in any case is almost entirely obviated by the development of steam traffic through the Suez Canal.*

The export of raw hides ran from 4,543,826, valued at Rs. 1,21,07,416, to 5,313,492, valued at Rs. 1,48,37,158; and of Hides and skins. raw skins from 2,207,420, valued at Rs. 15,22,649, to 2,915,798, valued at Rs. 18,75,284. This increased export was chiefly to the United States. There was a decrease in dressed hides and skins, entirely owing to the great and urgent demand for the raw article. The trade in dressed hides and skins is, however, in any case not important.

Raw jute, the exports of which have steadily declined during the last few years, shows an increase from 4,532,148 Jute and gunny bags. cwt., valued at Rs. 2,63,60,880, to 5,319,318 cwt., valued at Rs. 3,44,67,912. This increase is accounted for by the fact that the stocks of jute at home were low, and that the jute crop in Bengal came in just when the famine in Madras was beginning to abate. Freight for England consequently fell very low, and an unusual quantity of raw jute was shipped.

The exports of gunny bags fell from 32,568,261, valued at Rs. 63,93,613, to 25,093,969, valued at Rs. 69,47,116. The demand for bags from the United States decreased by eight millions in consequence of the diminished exports of wheat to Europe. The famine in China reduced by three millions the requirements of that country for the export of rice, while the demand from the United Kingdom fell by a million and a half. To a certain extent the effect of these reductions was neutralized by an increase of three millions of bags in the exports to the Straits, of half a million to Egypt, and a million and a half to Australia. The net decrease in exports amounted to seven and a half millions of bags. There is, however, no reason to suppose that this diminution of the exports represented a decline in the prosperity of the trade. The local demand for bags to send grain to the Madras famine was enormous, and the use of gunny bags enters more and more into the internal trade of the country. At the same time the manufacture has improved with longer experience, and the comparatively low rates of wages at which operatives can be obtained give Calcutta a considerable advantage for the supply of the American, Australian, Asiatic, and Chinese markets. It is understood that a certain proportion of the so-called exports to China are in fact sent to Singapore and the Straits Settlements, and that a still larger proportion, though nominally entered for Hong-Kong, are transhipped there and ultimately find their way to San Francisco. The following statement shows the export of gunny bags during the last five years:—

1873-74.		1874-75.		1875-76.		1876-77.		1877-78.	
No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.
6,402,365	19,03,659	7,387,147	22,30,194	18,695,025	43,07,650	32,568,261	63,93,613	25,093,969	69,47,116

The apparent increase which was noticed last year in the export of *lac* has not continued, and the exports have fallen almost to the level of 1875-76. The following are the figures for the last five years :—

1873-74.		1874-75.		1875-76.		1876-77.		1877-78.	
Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.
75,702	25,73,479	76,405	25,33,046	101,933	75,00,614	128,645	53,62,745	163,091	35,95,122

It will be seen that there has been a remarkable decline in the value of the exports since 1875-76. Apparently the reduction in duty sanctioned in July 1877 has had no beneficial effect on the trade.

Oil-seeds.

The exports of the various kinds of oil-seeds during the past five years were as follow :—

		Linseed.		Poppy seed.		Rape seed.		Teel seed.	
		Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.	Cwt.	Rs.
1873-74	...	2,297,360	1,14,50,304	298,203	16,40,115	100,508	4,52,284	46,982	2,81,875
1874-75	...	2,794,558	1,39,73,108	401,012	22,05,562	439,426	19,77,422	159,374	9,02,233
1875-76	...	4,117,952	2,12,30,609	242,962	12,92,520	905,926	41,68,895	44,225	2,19,604
1876-77	...	3,524,451	1,85,50,186	334,940	17,54,372	1,094,688	55,68,548	248,567	15,12,335
1877-78	...	5,199,353	2,97,73,810	447,354	26,32,155	1,852,166	1,04,10,664	255,237	17,60,990

The marked increase which occurred in the export of all oil-seeds during the past year is due partly to the war in Turkey, which closed the Black Sea ports and generally disorganized Russian trade, and partly to the extended use of these oils for machinery, in manufactures, and for illuminating purposes.

The export of raw silk rose from 1,410,371 lb, valued at Rs. 77,48,844, to 1,494,950 lb, valued at Rs. 70,20,328, being an increase in quantity of about 7 per cent.

Raw silk.

Almost the whole of this increase was sent to the United Kingdom; the exports to France showing a decrease, while those to Italy rose only slightly. It is thought that the extension of mulberry cultivation and the production of silk in the interior are signs of a revival of the trade. But there seems to be no grounds for believing that the rise of the exports in the past year was anything more than a temporary impulse. The European silk markets will continue to draw their main supplies from France and Italy; and it is only when the crops of those countries fail, and the deficiency is not supplied by China and Japan, that the Indian product can come into extensive demand.

The following statement shows the exports of tea during the last five years, with the average value per pound calculated from the aggregate value as returned by the shippers:—

		Rs.	Average value per lb.
1873-74	19,185,029	1,73,02,423	14 annas and 5 pie.
1874-75	21,023,939	1,92,34,801	14 " " 7 "
1875-76	24,220,450	2,15,00,362	14 " " 2 "
1876-77	27,529,198	2,58,07,047	15 " " 0 "
1877-78	33,186,878	3,01,73,000	14 " " 6 "

It is explained that the value is overstated, the tea not being really worth more than from 11 annas to 12 annas per pound. The increase in quantity is due to the fact that the produce of many gardens opened out about three years ago came into the market last year.

The export of tobacco, which fell from 18,885,400lb in 1875-76 to 9,403,997lb in 1876-77, showed a further decrease to 9,276,622lb in the year under review. The decrease is most marked in the case of exports to Trieste and Gibraltar, attributed in the former case to the ending of a contract for the supply of the Austrian army, and in the latter to the diminution of smuggling into Spain.

Trade in coin and bullion.—The following statement illustrates the fluctuations in the bullion trade during the last five years:—

	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.
	Rs.	Rs.	Rs.	Rs.	Rs.
Gold—					
Imports	47,26,526	65,15,405	56,55,289	20,38,770	44,26,195
Exports	6,93,143	2,609	6,76,375	19,697	370
Net imports ...	40,33,383	65,12,796	49,78,914	20,19,073	44,25,825
Silver—					
Imports	1,47,20,081	2,23,61,876	51,44,462	2,42,15,895	4,51,77,797
Exports	35,37,770	75,79,091	67,83,053	10,18,611	4,46,726
Net imports ...	1,11,82,311	1,47,82,785	.....	2,31,97,284	4,47,31,071
Net exports ...	.....	.....	16,34,591	.....	.....
Gold and silver—					
Imports	1,94,46,167	2,38,77,281	1,08,03,751	2,62,54,665	4,96,03,992
Exports	42,30,913	75,81,709	74,59,423	10,38,308	4,47,096
Net imports ...	1,52,15,694	2,12,95,581	33,44,323	2,52,16,357	4,91,56,896

As there is no gold currency in India, the imports of gold are regulated chiefly by the demand for ornaments, which varies with the material prosperity of the people. During the first three years of the period for which returns are furnished above, the net imports of gold into Calcutta amounted to about 52 lakhs. In 1876-77 they fell to about 20 lakhs, owing, it is stated, to the decline in the purchasing power of silver and to the straitened circumstances of many classes.

The imports into, and exports from, Calcutta in the interportal or coasting trade during 1876-77 and 1877-78 are shown in one view in the following statement:—

1876-77.

IMPORTS INTO, OR EXPORTS FROM, CALCUTTA.	FROM OR TO BRITISH INDIAN PORTS.						From or to Indian ports not British.	GRAND TOTAL.
	Bombay.	Sind.	Madras.	British Burmah.	Bengal out- ports.	Total.		
IMPORTS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Of Indian produce...	41,15,000	1,014	50,14,238	43,44,752	17,56,968			1,02,62,174
„ foreign merchan- dise	8,32,510	80	3,74,294	3,63,988	67,219	16,38,091	44,611	16,82,702
Total Imports ...	49,48,170	1,094	53,88,532	52,08,740	18,24,187	1,73,70,723	5,74,153	1,79,44,876
EXPORTS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Of Indian produce...	32,09,948	1,05,332	3,50,23,143	1,43,22,863	16,23,989	6,47,85,275	6,97,839	6,54,83,114
„ foreign merchan- dise	4,99,947	6,829	36,87,732	1,38,92,537	50,58,495	2,31,45,590	23,288	2,31,68,878
Total Exports ...	37,09,895	1,12,161	3,87,10,875	2,87,15,400	66,82,484	8,79,30,865	7,21,127	8,86,51,992

1877-78.

IMPORTS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Of Indian produce...	80,83,627	1,326	32,67,636	45,36,976	20,49,943	1,79,39,508	9,14,153	1,88,53,681
„ foreign merchan- dise	7,51,086	458	3,23,649	1,53,131	73,851	13,07,175	15,664	13,22,839
Total Imports ...	88,34,713	1,784	35,96,285	46,90,107	21,23,794	1,92,46,683	9,29,817	2,01,76,500
EXPORTS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Of Indian produce ...	2,13,36,725	66,156	5,45,22,501	1,81,07,038	21,11,121	9,61,43,541	15,64,741	9,77,08,283
„ foreign merchan- dise	5,02,678	3,216	42,04,273	1,25,52,612	48,95,025	2,21,57,804	12,839	2,21,70,643
Total Exports ...	2,18,39,403	69,372	5,87,26,774	3,06,59,650	70,06,146	11,83,01,345	15,77,580	11,98,78,925

In spite of a decline of 18 lakhs in the imports from Madras, and of five lakhs in those from British Burmah, the value of the total imports from British Indian ports rose from Rs. 1,73,70,723 to Rs. 1,92,46,683. At the same time the value of the imports from Indian ports rose from Rs. 5,74,153 to Rs. 9,29,817. The most important feature of the import trade from British Indian ports was the development of the Bombay imports, which rose in value from Rs. 49,48,170 in 1876-77 to Rs. 88,34,713 in the past year, being an increase of 39 lakhs. The imports of raw cotton rose by 11 lakhs, those of cotton twist and yarn of Indian manufacture by 10 lakhs; while the imports of Indian grey cotton piece-goods show a rise in value of 17

lakhs. It is believed that the raw cotton was required for manufacturing purposes in the mills near Calcutta. Details of the imports of cotton twist and piece-goods of Indian manufacture are shown below :—

	1873-74.		1874-75.		1875-76.		1876-77.		1877-78.	
	lb	Rs.	lb	Rs.	lb	Rs.	lb	Rs.	lb	Rs.
Cotton twist and yarn of Indian manufacture...	49,200,29,638		321,600	1,83,049	395,420	2,01,713	3,523,396	16,32,700	5,624,823	26,70,702

	1873-74.		1874-75.		1875-76.		1876-77.		1877-78.	
	Yds.	Rs.	Yds.	Rs.	Yds.	Rs.	Yds.	Rs.	Yds.	Rs.
Cotton piece-goods of Indian manufacture...	9,589	.....	14,981	840,392	1,53,281	3,347,382	7,36,907	10,346,909	24,82,207

The rapid advance of these imports is the most conspicuous feature of the interport trade of Calcutta. Between 1873-74 and the past year the imports of cotton twist and yarn, which are almost wholly from Bombay, have risen from less than 50,000lb to more than five millions and a half. This increase is due not only to the natural development of the trade, but to the use of some of the coarser descriptions of Bombay yarn for making cloth formerly woven from English yarn. Cloth thus made is cheaper and coarser, but at the same time more durable, than that made from English yarn, and it is stated that many natives who formerly used the finer English fabric are now content with cloth manufactured out of Bombay yarn.

Almost the whole import of Indian piece-goods is drawn from Bombay, a trifling quantity of grey goods being entered as coming from "other ports." This branch of the trade also has developed enormously during the last five years. The imports in 1875-76, the first year for which returns of quantities are available, amounted to 840,392 yards, valued at Rs. 1,53,281, while the imports of the past year were no less than 10,346,909 yards, valued at Rs. 24,82,207. It is difficult to say what proportion of this large import represents a permanent extension of the Bombay trade and successful competition with Manchester-made goods, and what proportion is a merely temporary increase arising from the famine in Western India, which closed some of the local channels of consumption and induced extensive exportation to Calcutta.

The decline in the Madras imports, due to the famine in that presidency, has taken effect mostly in the trade in the castor seed, raw cotton, untanned skins, cocoanut kernel. Although the timber trade with Burmah shows an increase, the imports of raw cotton, cutch, stick lac, and mineral oil, have declined. From the outports of Bengal there was an increase of three lakhs in the total imports, chiefly under the

heads of timber, myrabolams, raw hides, raw jute, and stick lac, from the Orissa ports, and raw caoutchouc from Chittagong. Chittagong shows a decrease in tea, which is imported into Calcutta for re-export to the United Kingdom, and the expansion of direct trade between Madras and the Orissa ports has reduced the imports of rice from the latter.

The value of the total exports from Calcutta in the coasting trade is returned as Rs. 11,98,78,925, against Rs. 8,86,51,992 in the previous year. The ex-

ports to Indian ports rose from Rs. 8,79,30,865 to Rs. 11,83,01,345; while the exports to Indian ports not British increased from Rs. 7,21,127 to Rs. 15,77,580. The main export was that of rice to Madras, which rose in value from 270 lakhs to 386 lakhs, while the export of rice to Bombay advanced from 54 lakhs to 126 lakhs. At the same time there was a marked increase in the exports to Madras of gram, wheat, and pulse. In consequence of the enormous demand for export purposes the local prices of all kinds of grain rose enormously in all the exporting districts of Bengal, and the non-agricultural classes who did not share in the profits accruing from the sale of grain suffered some inconvenience, which in places amounted almost to positive distress. The increase of eight lakhs in the export to Indian ports not British was due to the shipment of rice and food-grains to Pondicherry and Nanakal to relieve the distress in those parts.

The following statement illustrates the interport trade in cotton twist and piece-goods of Indian and British manufacture during last five years:—

	1873-74.		1874-75.		1875-76.		1876-77.		1877-78.	
	lb	Rs.	lb	Rs.	lb	Rs.	lb	Rs.	lb	Rs.
Cotton twist and yarn of Indian manufacture.	1,536,110	9,73,975	3,020,008	18,53,112	3,411,675	19,65,708	4,200,985	22,12,279	4,157,710	35,54,323
Cotton twist and yarn of foreign manufacture.	2,970,437	20,21,516	2,444,576	23,39,446	2,132,823	21,06,641	3,384,251	31,51,411	3,874,995	35,17,292

	Pcs.	Rs.	Pcs.	Rs.	Yds.	Rs.	Yds.	Rs.	Yds.	Rs.
of Indian manufacture.	18,507	53,446	13,277	23,397	40,427	15,350	66,813	20,555	220,052	50,351

	1873-74.		1874-75.		1875-76.		1876-77.		1877-78.	
	Yds.	Rs.	Yds.	Rs.	Yds.	Rs.	Yds.	Rs.	Yds.	Rs.
Cotton piece-goods of foreign manufacture.	40,008,220	80,55,006	44,919,182	86,92,664	45,657,924	84,69,425	55,375,391	1,02,00,965	50,788,064	90,22,095

Although the total exports of Indian twist and yarn have fallen off, there was a slight increase in the shipments to British Burmah, which takes nearly the entire export. Foreign twist and yarn, which

go chiefly to the Orissa ports and Burmah, show a slight improvement. The export of Indian piece-goods has trebled, though the value is only half a lakh at present. Owing to diminished shipments to British Burmah the exports of foreign piece-goods has declined. It may be expected, however, that the development of direct trade between the United Kingdom and British Burmah will result in a diminution of the exports to that province from Calcutta.

The Port of Chittagong.—The customs duty levied at the port of Chittagong during 1877-78 amounted to Rs. 6,56,055, against Rs. 6,81,660 in the previous year. This decrease of Rs. 25,605 occurred entirely in the duty on imports, the revenue realized from exports showing an increase of Rs. 10,217. It is accounted for by the fact that the duty collected on salt fell from Rs. 6,30,782 in 1876-77, to Rs. 5,96,534 in the year under report; this decline being to some extent counterbalanced by a rise in the goods duty on general merchandise from Rs. 50,878 to Rs. 59,521.

Foreign trade.

The following statement shows the value of the foreign trade of Chittagong during the last five years:—

	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.
	Rs.	Rs.	Rs.	Rs.	Rs.
IMPORTS.					
Merchandise	11,93,704	4,76,866	2,72,904	2,61,989	2,25,851
Treasure	6,000	.....	1,709	.....	10,000
Total	11,99,704	4,76,866	2,74,613	2,61,989	2,35,851
EXPORTS.					
Indian produce	28,82,409	23,61,634	18,25,946	6,07,107	16,63,223
Foreign merchandise	11,705	9,985	4,783	140	55
Total	28,94,114	23,71,619	18,30,729	6,07,247	16,63,278
Treasure ... ..	.....	.....	.....	.....	.....
Total	28,94,114	23,71,619	18,30,729	6,07,247	16,63,278
Total Trade	46,93,818	28,48,485	16,65,033	8,69,236	18,99,129

It will be seen that the value of imports in the foreign trade fell off by Rs. 25,138. The decrease occurred in the import of cocoanuts, kernels, and oil from Ceylon; of coir, cowries, and cocoanuts from the Maldivé Islands; and of fireworks, dammer, and paper from the Straits Settlements. On the other hand the import trade with the United Kingdom shows an increase of Rs. 4,031, owing, it is believed, to the high price of salt resulting from a combination among the bonders.

The value of the exports from Chittagong during the past year amounted to Rs. 16,23,278, against Rs. 6,07,247 in the preceding year. A large proportion of this remarkable increase is due to the establishment of a direct trade

Export trade.

between Chittagong or the United Kingdom in jute brought into Chittagong from Naraingunge by a river route which has only recently been resorted to. The value of these exports is returned as Rs. 7,12,000. It would be premature at the present time to attempt to forecast the prospects of this development of the local trade. The navigation of the river Megna presents serious difficulties even for vessels of light draught. A thorough survey has not yet been made, and since the close of the year several cases of grounding have been reported. But it may be hoped that with further experience these difficulties will be overcome, and that a permanently navigable route will be discovered. The enhanced export of rice to Mauritius and Bourbon is to some extent only apparent, arising from the high price of grain; but the tonnage returns show that the trade, which had fallen off in 1876-77, materially revived during the past year. The decline in the exports to Ceylon, which was remarked upon in last year's resolution, was continued, the value of the exports falling from Rs. 4,83,379 to Rs. 2,76,076. This, however, was caused by the diversion of the grain trade to British Indian ports in consequence of the heavy demand from Madras.

Bullion trade.

The imports and exports of bullion at Chittagong during the last two years were as follow:—

<i>Imports.</i>		<i>Exports.</i>	
	Rs.		Rs.
1876-77	5,55,910	1876-77	7,99,300
1877-78	10,53,500	1877-78	1,50,168

No gold was imported during the past year. Silver to the value of Rs. 10,000 was imported from Ceylon. The imports of the same metal from British Indian ports rose from Rs. 5,50,000 to Rs. 10,43,500, in consequence of the high prices of produce and the requirements of the export trade in grain. The fall in the exports of bullion is due to the cessation of large financial transactions with Rangoon in consequence of the closing of the Branch Bank of Bengal at Chittagong.

Excluding the movements of treasure which have been noticed

Interportal trade.

above, the imports of the interportal trade of Chittagong show a decline from Rs. 13,58,208 to Rs. 13,16,686. The imports of Indian produce, however, increased by Rs. 32,363, which is attributed to shipments of grain from British Burmah for local consumption. The imports of foreign merchandise in the interportal trade fell by Rs. 73,885; but the value of this trade is still very much higher than in 1873-74 and 1874-75. The total exports rose in value from Rs. 18,40,985 to Rs. 23,44,529. This conspicuous increase was caused by the shipments of grain to the Malabar and Coromandel to meet the famine demand.

The Orissa ports.—The foreign trade of the Balasore ports is of slight importance. During the past year there

Balasore ports.

were no imports, and the value of the whole trade declined from Rs. 1,97,558 to Rs. 1,66,235. The customs duty rose from Rs. 18,224 to Rs. 28,138; but the export duty shows a decrease of nearly Rs. 6,000 in consequence of a great portion of the export of rice having been diverted to Madras instead of going to Ceylon, Mauritius, and the Maldives.

The following statement illustrates the remarkable growth of the coasting trade of the Balasore ports during the last five years:—

	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.
	Rs.	Rs.	Rs.	Rs.	Rs.
IMPORTS.					
Merchandise—					
Indian produce	18,969	7,594	6,57,853	7,20,189	12,13,386
Foreign merchandise	4	.....	11,25,499	14,58,735	22,22,741
Total	18,973	7,594	17,83,352	21,87,924	34,36,127
Treasure	27,850	3,450	2,83,350	28,39,553	19,00,062
Total	46,823	11,044	20,66,702	34,27,477	53,36,189
EXPORTS.					
Merchandise—					
Indian produce	2,19,492	2,47,636	13,66,669	29,61,655	49,08,643
Foreign merchandise ... ..	.....	.....	9,139	5,696	1,786
Total	2,19,492	2,47,636	13,75,808	29,67,351	49,10,429
Treasure	10,000	.....	2,52,057	8,55,823	7,80,937
Total	2,29,492	2,47,636	16,27,865	38,23,174	56,97,366
Total Trade	2,76,315*	2,58,680*	36,94,567	72,50,651	1,10,33,555

* The figures for trade with other ports in the presidency are not included.

Excluding treasure, the imports show an increase of nearly 12½ lakhs, and the exports of nearly 19½. Cotton twist and piece-goods, copper, betelnuts, and apparel, were imported in large quantities to meet the demand created by the money which had been poured into the country in payment for agricultural produce. At one time towards the close of the past year the stock available in the district had been reduced so low that several cargoes of rice were imported into Chandbally by steamer from Calcutta in order to complete the cargoes of ships which had been chartered at the former port, but which could not obtain enough rice at Chandbally. The enhanced exports were mainly due to extensive shipments of rice to Madras in answer to the famine demand. It is stated that the quantity of rice and paddy exported did not much exceed the exports of the previous year, but the price was considerably higher. Further inquiry has shown that the statement made in last year's resolution, that a large proportion of the rice shipped at Chandbally was the produce of the Cuttack district, was scarcely correct. A small quantity of the rice grown in the tract between the Brahminee and Byturnee rivers in Cuttack is sent for shipment to Chandbally, but the bulk of the rice exported from Chandbally comes from the southern part of Balasore and the Tributary Estates. Rice is also sent from Chandbally by inland creeks to False Point for shipment. The export of hides shows an improvement of three lakhs, and the timber trade of two lakhs. Nearly all of this timber is sâl or sisoo wood from the Tributary Estates, and it is satisfactory to find that the improvement of communications which has gone on of late years in Orissa has rendered it possible to bring the natural produce of these estates into the export market.

The value of the foreign imports of Cuttack in 1877-78 was Rs. 2,836. They consisted chiefly of liquors and provisions imported from England for private consumption. During the three years previous there were no foreign imports at all. The foreign exports fell from Rs. 5,53,923 to Rs. 4,04,192 in consequence of the demand in the coasting trade, which diverted to Madras a large proportion of the rice which in ordinary years would be sent to Mauritius, Colombo, and Jeddah.

The coasting trade of Cuttack during the past five years may be shown as follows:—

	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.
IMPORTS.					
Merchandise—	Rs.	Rs.	Rs.	Rs.	Rs.
Indian produce	26,399	16,678	2,96,751	3,16,593	11,04,250
Foreign merchandise	7,000	6,694	10,57,435	7,12,170	18,17,093
Total ...	33,399	23,372	13,54,186	10,58,763	29,21,333
Treasure	1,05,650	.....	24,420	1,20,310	6,79,864
Total ...	1,39,049*	23,372*	13,78,606	11,88,073	36,01,187
EXPORTS.					
Merchandise—					
Indian produce	2,44,916	8,66,915	2,85,367	13,75,620	30,10,717
Foreign merchandise	115	26	3,128	212	10,943
Total ...	2,45,031	8,66,941	2,88,495	13,75,832	30,21,660
Treasure	11,000	.....	6,65,000	9,76,350	2,50,000
Total ...	2,56,031*	8,66,941*	9,03,495	23,52,182	32,71,660
Total Trade ...	3,95,101*	3,90,313*	22,82,101	35,40,255	68,72,847

* These figures do not include the trade with other ports in Bengal.

The port of Pooree, which is in fact nothing more than an open roadstead, has no foreign import trade, and the value of the export trade to foreign ports fell during the past year from Rs. 66,642 to Rs. 7,287. The usual export of rice to Ceylon entirely ceased in consequence of activity of the coasting trade, and there was only a small shipment of myrabolams to the United Kingdom. As there were no exports of dutiable products, no customs revenue was realized during the year. In the coasting trade the imports of merchandise fell from Rs. 29,275 to

Rs. 25,447, and the imports of treasure from Rs. 72,000 to Rs. 37,184. During the past year the outturn of rice throughout the district was below the average, and prices rose abnormally high. The exports accordingly declined in value from Rs. 6,65,929 to Rs. 5,55,609; other causes helped to diminish the exports from Pooree itself. The canal leading to False Point, which is usually closed during the hot season, was open the whole year, and large quantities of grain, which otherwise might have been exported to Madras from Pooree, were shipped at False Point. At the same time a considerable trade was carried on by land between Pooree and the district of Ganjam in Madras through the Government estate of Khoorda. Salt is imported from Ganjam by bullock carts, which return laden with rice.

The registration of river traffic was begun in Bengal in 1872, when a station was established at Sahebgunge with the object of registering the Ganges-borne trade between Eastern and Northern Bengal on the one hand and the districts of Behar and the North-Western Provinces on the other. In September 1875 the extension of the system throughout the whole of Bengal was sanctioned. A number of stations were accordingly selected on the larger rivers, on the canals, and on certain roads, and all articles passing these stations were ordered to be noted, with particulars as to the mart and district from which they came and the mart and district to which they were going. The total entries for each mart and district in the year, as returned by all the registration stations, were supposed to represent the gross traffic of the country. The stations established were, however, few in number compared with the total number of traffic routes, and they were placed only on the larger streams and on the most important traffic routes. All the traffic on feeder streams, and the local traffic between the different districts, did not come within the scope of registration. The figures, therefore, obtained at the registration stations necessarily fell far short of those which would represent truly what may be called the gross traffic of the country.

As regards local traffic, all that the figures (compiled with much labour and expense) showed was that an amount of traffic from certain places to certain other places happened to pass through certain stations. This fact, taken by itself, was not of much practical value. Unless, for instance, it was known that a particular district produced an inadequate food-supply for its inhabitants, and to what extent it was inadequate, it would not be of much practical use to know that another district sent 5,000 maunds of paddy to it. If it could be positively said that a district regularly received from other districts supplies of rice amounting to so many lakhs of maunds, while its exports of rice were trifling, a useful fact would have been ascertained, leading to a safe inference that the district in question did not produce enough food for its inhabitants, and agricultural and trade statistics could usefully be compared. But such an inference could not properly be drawn in regard to any district on the system introduced in 1875; and where such inferences were drawn in the Trade Report for 1876-77, they were to a great extent founded upon incomplete data, helped out by a general knowledge of recognized facts.

In that Report it is stated that the object of the scheme was to show the internal trade of the province, and indicate both the sources whence Calcutta derived its exportable supplies and the distribution of its imports in the interior of the country. But however desirable this object was, the system as worked attempted to go beyond it, and necessarily failed to give a complete and useful record of internal trade. An examination of Chapter III of the Report for 1876-77, which treats of the principal staples of trade in Bengal, showed that a simple system of registry at seaports would take account of nearly all the traffic that came under registration. The great bulk of the trade, in rice, for instance, so far as it can be registered by any reasonably economical system, lies between Calcutta and the interior. The report showed that during 1876-77 Calcutta took nearly 19 millions out of the 25 (registered) millions of maunds of surplus rice of the country, while $3\frac{1}{2}$ millions went from Orissa and Chittagong. Similar results were obtained by an examination of the results of the registration of most of the other staples. Of the $57\frac{1}{4}$ lakhs of maunds of pulse and gram registered, 36 lakhs came to Calcutta. Miscellaneous grains went chiefly to Behar or Calcutta. Almost the whole of the wheat traffic went to Calcutta. Nearly all the jute found its way to Calcutta. Seventeen and a half millions of gunny bags came to Calcutta, while only about $2\frac{1}{2}$ millions were registered as imported by other districts. Sixty-eight lakhs of maunds of linseed were registered, of which 50 lakhs came to Calcutta. Calcutta took half of the whole trade in mustard-seed also. It also took a large share of the sugar, though of course not such a great share in proportion as of other things, much sugar being consumed in the interior. In tobacco and cotton also there is a good deal of interdistrict trade, which would in any case not be registered; but tea, silk, indigo, hides, and saltpetre would nearly all be registered in Calcutta.

As regards imports into the interior from beyond sea, these would of course all be registered at the seaports, and it would be useless registering them again at internal stations.

For the above reasons it was determined towards the close of 1877 to abandon most of the stations in the interior and to limit the registration of internal traffic almost entirely to registering thoroughly the chief staples coming into and going out of Calcutta and the other

1. Patna.
2. Hooghly.
3. Serajgaunge.
4. Goalundo.
5. Kooshtea.
6. Khoolna.
7. Nussirabad.
8. Narmangunge.
9. Chittagong.

seaports, with the places from which they came, and their destinations. Accordingly the stations marginally noted were abolished from the 1st of January 1878. It is of great importance that correct information should be available as to stocks in Calcutta itself, and that therefore the town should be treated as a separate and special block, receiving from beyond sea on the one side and despatching to the interior on the other, and *vice versa*, while at the same time retaining the difference for its own consumption. To this end the Govern-

Registration of Calcutta
trade.

ment, on the recommendations of a committee appointed for the purpose, sanctioned the establishment, from the 1st of January 1878,

of 26 posts round Calcutta on both sides of the river Hooghly, namely—

I. Registration cordon on the Howrah side :—

(a)—Road stations—

- | | | | |
|----|----------------|-----|--------------------------|
| 1. | At Beloor | ... | on the Grand Trunk Road. |
| 2. | „ Belgatchee | ... | „ Old Benares Road. |
| 3. | „ Bankra | ... | „ Juggutbulbulpore Road. |
| 4. | „ Santragachee | ... | „ Jogatchee Road. |
| 5. | „ Makooah | ... | „ Mohyaree Road. |

(b)—River stations—

6. At Sulkeah Ghât.
7. „ Rankistopore Ghât.
8. Floating station on the Hooghly river.

II. Registration cordon on the Calcutta side :—

(a)—Road stations—

- | | | | |
|-----|-----------------|-----|-----------------------|
| 9. | At Kamardangal | ... | on the Baraset Road. |
| 10. | „ Bon Hooghly | ... | „ Barrackpore Road. |
| 11. | „ Moteejheel | ... | Kossipore Road. |
| 12. | „ Mateabrooj | ... | Akra Road. |
| 13. | „ Jhinjeer Pool | ... | Budge-Budge Road. |
| 14. | „ Behala | ... | Diamond Harbour Road. |
| 15. | „ Gurraah | ... | Joynugger Road. |
| 16. | „ Kowrapooker | ... | Tallygunge Road. |

(b)—River stations—

17. At Port Commissioners' wharves between Watgunge and Cossipore Gun Foundry.
18. „ Nimuek Mehal Ghât.
19. „ Mateabrooj Ghât.

(c)—Canal stations—

- | | | | |
|-----|----------------|-----|--------------------------|
| 20. | At Chitpore | ... | } on the Circular Canal. |
| 21. | „ Dhappa | ... | |
| 22. | „ Bamvughatta | ... | |
| 23. | „ Samookpottah | ... | |
| 24. | „ Kidderpore | ... | } on the Tolly's Nullah. |
| 25. | „ Panspottah | ... | |
| 26. | „ Kowrapooker | ... | on the Kowrapooker Khal. |

The offices on the Nuddea rivers were kept up, as it was important to know exactly what amount of traffic comes down those streams. The registration at the Midnapore and Orissa Canals was also continued for special purposes.

The existing station at Sahebgunge has been kept up for registering the river traffic between Bengal and Behar. The supply that comes from the North-Western Provinces *via* the Upper Gogra is registered at Duroowlee, while another station has been, since the close of the year, established at the junction of the Ganges and the Gogra to intercept the traffic carried on between the North-Western Provinces and Behar along the Ganges and the Lower Gogra.

The Duroowlee and Buxar stations have been retained for inter-provincial registration between Bengal and the North-Western Provinces. To complete the registration of the river trade between Bengal and the North-Western Provinces a third station was considered necessary for

Registration of traffic on the Nuddea rivers, and on the Midnapore and Orissa Canals.

Registration of Behar traffic.

Registration of inter-provincial traffic.

intercepting the trade carried along the Ganges and the Lower Gogra. This portion of the interprovincial traffic had hitherto been intercepted at the internal station at Patna; but the Patna station being no longer required for internal registration, it was decided to change the position of the station from Patna to the confluence of the Ganges and the Gogra, and to devote the station to the registration of interprovincial rather than internal traffic. The Government of the North-Western Provinces has agreed to bear a moiety of the cost of the establishment required for the purpose, and arrangements are being made for commencing registration at this station. The stations at Chilmaree and Bhojrub Bazar are necessary to register the traffic with Assam, and were therefore retained. The arrangement for registering trade with Madras at Rumbha, a post on the main road between Cuttack and Ganjam, has not been interfered with. The registration of the trade with the Central Provinces is carried on by the Chief Commissioner of those provinces, the Government of Bengal defraying one-half of the cost. The Government of India has since directed the discontinuance of the registration of interprovincial traffic, as not required for imperial purposes.

The registration tickets, referred to in paragraph 26 of Chapter I of the Trade Report for 1876-77, are still in use in most of the river stations, and indeed they are the very best means that could be devised for avoiding the registry of a single consignment twice over.

For registering the trade with Nepal, Sikkim, and Bhutan there are 22 stations along the frontier. The correct registration of this trade is, however, attended with special difficulties.

The system now introduced for the registration of railway traffic admits of the compilation of returns of traffic from any one railway to any other, or part of any other railway, as well as of statements showing the railway trade of any town on the line of rail. As regards Bengal the line of the East Indian Railway in Bengal and Behar has been divided into the following blocks:—

- | | |
|----------------------------|------------------------------------|
| 1. Behar. | 2. Below Behar (excluding Howrah). |
| 3. Howrah (with Calcutta). | |

The blocks beyond the Bengal presidency are—

- | | |
|--|--|
| 1. Punjab. | 7. Majputana Railway. |
| 2. North-Western Provinces, Meerut division. | 8. Muttra and Hattress Railway. |
| 3. Ditto ditto, Agra do. | 9. Central Provinces. |
| 4. Ditto ditto, Allahabad do. | 10. Great Indian Peninsular Railway in Bombay (excluding Bombay city and Bynulla). |
| 5. Ditto ditto, Benares do. | 11. Bombay. |
| 6. Oudh. | |

The trade of Patna, including Bankipore and Dinapore, will be separately returned. For Calcutta special returns will be prepared in respect to the principal staples, showing in detail the places from which and to which the traffic goes. The foregoing arrangements have been brought into effect from the 1st of October last.

In regard to the traffic carried along the Eastern Bengal line arrangements were made by the Government of Bengal, with effect

from January 1878, for the compilation of traffic returns showing the total imports into, and exports from, Calcutta in all staples of traffic, and for the preparation of special returns in respect of some of the principal staples, showing the place they came from in the case of imports, and their destination in the case of exports.

Registration of steamer traffic.

The arrangements for recording the statistics of the steamer traffic have been the same as in the previous year.

Registration at the sea-ports at Chittagong and Orissa.

Arrangements are being made to secure efficient registration at Chittagong and the ports in Orissa.

The total value of the import and export trade of Calcutta with the interior of the country registered during 1877-78, as compared with the figures of the preceding year, was as follows:—

Specification of Routes.	IMPORTS.		EXPORTS.	
	1876-77.	1877-78.	1876-77.	1877-78.
	Rs.	Rs.	Rs.	Rs.
By country boats	10,14,92,500	14,69,14,637	4,26,10,100	4,62,75,458
" river steamers	2,56,36,800	3,08,90,785	81,10,800	1,27,48,771
" E. I. Railway	10,00,31,100	12,48,99,022	11,56,80,800	12,97,27,129
" E. B. Railway	2,99,67,800	4,33,13,132	2,48,38,800	3,13,88,769
" S.-E. State Railway	2,70,145	5,97,753	98,335	61,606
" road	95,86,700	1,45,24,791	37,94,630	78,59,127
Total	26,69,85,045	36,11,40,120	19,51,53,465	23,10,55,160

The following statement shows the quantities of the principal staples imported into Calcutta from the interior of the country, and also the quantities of the same staples exported from Calcutta by sea, during the year 1877-78, as compared with the figures of the preceding year:—

Chief staples of country produce.	Imported into Calcutta from the interior.				Exported from Calcutta by sea.			
	1876-77.		1877-78.		1876-77.		1877-78.	
	Mds.	Cwt.	Mds.	Cwt.	Mds.	Cwt.	Mds.	Cwt.
FOOD-GRAINS.								
Rice and paddy—								
Rice not in the husk	1,96,89,354	14,45,544	2,43,21,289	17,868,701	1,94,20,528	14,208,118	2,19,43,933	16,121,837
Rice in the husk	8,41,704	618,394	13,61,547	1,000,320	34,204	25,130	3,28,765	244,563
Wheat	64,83,361	4,763,766	71,39,477	5,238,717	54,01,100	3,968,165	64,40,729	4,738,576
Gram and pulse	36,00,000	2,614,897	47,39,530	3,475,491	18,43,883	1,354,687	32,38,920	2,379,540
Miscellaneous								
"spring and rain crops	3,51,115	257,962	4,06,739	298,820	2,04,093	149,944	3,18,174	233,760
Total of food-grains	3,09,66,104	22,754,606	3,79,56,582	27,882,058	2,69,03,817	19,766,036	3,22,78,451	23,714,776
FIBROUS PRO- DUCTS.								
Jute, raw	83,03,913	6,160,835	1,00,92,662	7,415,015	62,25,947	4,574,151	73,52,243	5,401,639
No.	No.	No.	No.	No.	No.	No.	No.	No.
Gunny bags	105,566,968	105,566,968	101,446,492	101,446,492	65,248,002	65,248,002	57,869,420	57,869,420
Pes.	Pes.	Pes.	Pes.	Pes.	Pes.	Pes.	Pes.	Pes.
Gunny cloth	226,106	4,822,900	50,355	1,007,100	356,204	7,124,901	203,556	4,071,115

* A considerable quantity of gunny cloth is manufactured locally.

Chief staples of country produce.	Imported into Calcutta from the interior.				Exported from Calcutta by sea.			
	1876-77.		1877-78.		1876-77.		1877-78.	
	Mds.	Cwt.	Mds.	Cwt.	Mds.	Cwt.	Mds.	Cwt.
OILSEEDS.								
Linseed	49,68,000	3,649,959	50,77,450	5,199,753	47,97,210	3,524,475	70,76,947	5,199,590
Mustard and rapeseed	25,73,000	1,890,367	35,62,500	2,617,347	14,94,490	1,097,991	25,28,334	1,857,543
OTHER PRODUCTS.								
Indigo	1,19,600	87,868	1,80,938	132,287	91,590	69,495	1,35,448	99,512
		lb		lb		lb		lb
Tea	3,69,651	29,572,061	4,51,041	36,083,306	3,46,707	27,741,358	4,18,990	33,519,239
Silk	22,606	1,808,480	27,398	1,191,840	2,281	1,782,462	27,248	2,179,838
		Cwt.		Cwt.		Cwt.		Cwt.
Cotton, raw	6,25,203	459,333	3,69,281	271,308	4,23,690	311,282	1,33,875	98,357
Salt-petre	6,18,902	454,703	6,30,294	463,672	6,31,774	464,160	5,31,730	390,659

A similar statement shows in a comparative form the principal staples of sea-borne import trade, and the total quantities exported from Calcutta into the interior of the country :—

Chief staples of sea-borne imports.	Imported into Calcutta by sea.		Exported from Calcutta into the interior.			
	1876-77.	1877-78.	1876-77.		1877-78.	
	Rupees.	Rupees.	Rupees.		Rupees.	
Cotton piece-goods	9,28,35,710	11,35,01,500	11,55,39,000		12,23,03,463	
	Mds.	Mds. lb	Mds.	lb	Mds.	lb
Cotton, twist & yarn	1,74,821 13,985,680	1,90,423 15,233,851	2,03,275 16,262,000	2,66,527 21,322,160		
	Tons.	Tons.	Tons.	Tons.		
Salt	76,57,400 281,292	80,50,768 295,712	73,87,900 271,374	86,25,418 316,852		

In the following pages a brief account is given of the course of traffic in respect to each of the most important staples of country produce imported into Calcutta by inland routes, and of European goods imported by sea into Calcutta, and thence exported for distribution in the interior of the country.

Rice.—The surplus produce of the rice-producing tracts of Bengal finds its way, generally speaking, either to Calcutta for local consumption and export by sea, or to Behar and the North-Western Provinces for local consumption, or to Chittagong for export by sea.

The rice trade showed unusual activity during 1877-78, owing to the demand for export on account of famine in Madras and elsewhere. The quantity brought to Calcutta by river routes was nearly 46½ per cent. in excess of the imports by the same routes during the preceding year, and the quantity brought by rail was more than 30 per cent. over the quantity carried during 1876-77.

The total registered imports during the past year amount to 2,43,21,289 maunds, as against 1,79,39,354 maunds in the preceding year. The following statement shows the sources of this supply, province by province, as compared with the trade of the previous year:—

Imports into Calcutta.

Sources of supply, province by province.	By boat and road.		By rail and steamer.		Total.	
	1876-77.	1877-78.	1876-77.	1877-78.	1876-77.	1877-78.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
From Bengal districts ...	1,27,50,280	1,76,88,387	39,94,476	57,68,102	1,67,44,756	2,34,56,489
„ Behar districts ...	1,08,043	3,28,803	5,48,915	1,56,448	6,56,988	4,85,251
„ Orissa ...	32,411	18,118	3,24,419	1,45,856	3,56,830	1,63,974
„ Chota Nagpore ...	.....	21,089	50,226	61,035	50,226	82,124
„ Assam ...	1,21,048	1,39,874	.....	2,577	1,21,048	1,42,451
„ North-Western Provinces and Oudh. }	873	7,498	8,592	7,823	9,465	15,321
„ Punjab ...	.....	.....	25	42	25	42
„ Central Provinces ...	.....	.....	16	338	16	338
„ Madras ...	.....	.....	.....	4,273	.....	4,273
„ British Burmah ...	.....	.....	.....	20,653	.....	20,653
„ Other places ...	.....	.....	.....	373	.....	373
Total ...	1,30,12,655	1,81,53,769	49,26,699	61,67,520	1,79,39,354	2,43,21,289

Of the imports of rice into Calcutta, the 24-Pergunnahs and Burdwan supplied each more than 38 lakhs of maunds. The district of Backergunge, which stood first on the list of supplying districts during 1876-77, occupied the third place with an exportation of 32 lakhs of maunds, as against 35½ lakhs in the preceding year. It is satisfactory to find that, notwithstanding the destruction of life and property, and the serious injury to the crops caused by the cyclone and storm-wave of October 1876, the resources of the district should have been found capable of meeting so heavy a drain upon them. The supply from Midnapore amounted to more than 26 lakhs of maunds. Hooghly supplied nearly 14½ lakhs, and the districts of Northern Bengal nearly 17 lakhs of maunds, of which Dinagore alone contributed more than 11½ lakhs of maunds. During February and March last the newly-opened line of the Northern Bengal State Railway brought down 85,883 maunds of rice to Calcutta, and it may be expected that the bulk of the surplus produce of the tract of country traversed by the Northern Bengal State Railway will in future be brought down to Calcutta by rail without waiting for the inundation months.

The exports of rice from Calcutta by sea amounted during the past year to 221 lakhs of maunds, or 16 million of cwts., as against 188 lakhs of maunds, or 13½

Exports by sea.

million of cwts., in the preceding year. The supply was distributed as follows:—

1877-78.		
	Mds.	Cwt.
To Indian ports, viz.—		
Madras	86,31,344	6,341,395
Other ports in Madras	21,27,764	1,563,255
Bombay	34,32,462	2,521,809
Other ports in Bombay	5,118	3,759
British Burmah	12,073	8,870
Pondicherry	1,98,733	146,008
Other Indian ports	2,37,801	174,713
Total of interportal trade	1,46,45,296	10,759,809
To foreign ports, viz.—		
United Kingdom	5,03,990	370,276
Other foreign ports	70,17,595	5,155,786
Total of foreign trade	75,21,585	5,526,062
Grand total of exports by sea	2,21,66,881	16,285,871

The sea-borne exports of the port of Calcutta since 1872-73 are shown in round numbers as follows:—

Mds.			Mds.		
1872-73	...	1,03,00,000	1875-76	...	58,00,000
1873-74	...	74,80,000	1876-77	...	1,88,00,000
1874-75 (famine year)	...	48,00,000	1877-78	...	2,21,00,000

The inquiry which is at present being made monthly by visiting all the markets and *entrepôts* in Calcutta showed the stocks in the first week of April last at 20,37,000 maunds, namely—

Stock in trade in Calcutta.

	Mds.
Baliaghatta	7,31,700
Ooltadanga	53,000
Chitpore, Golabaree, Coomertolee, Hatkhola, and Calpyghat	4,47,200
Pathooriaghatta, Posta, and Jorabagan	15,500
Tollygunge, Chitlah, Kidderpore, and Moonsheegunge	1,60,000
Twenty-one minor bazars (estimated)	2,40,000
Other retail shops, 3,129 in number (estimated)	2,50,000
Boidyabatty, Nawabgunge, Bhuddressur, and Chandernagore	29,294
On railway premises both sides the river	26,716
On boats unloaded	84,687
Total	20,37,097

Probable stocks available for exportation by sea ... 97 lakhs.

Paddy is not shown in the foregoing statements. The total imports of paddy are 13,61,000 maunds; the total exports are 3,29,000 maunds. Deducting exports from imports, there remains a balance of

10,32,000 maunds, which, at the rate of 25 seers to a maund of paddy, is equivalent to 6,45,006 maunds of rice. If this figure was added to the stocks of rice, as shown above, the total stocks would be raised to 26,82,000 maunds.

The total imports of 24 million maunds of rice into Calcutta during 1877-78, as compared with the figures of the previous year, may be summed up as follows:—

	1876-77.	1877-78.
	Mds.	Mds.
From the Sunderbun districts	68,50,000	75,00,000
„ Western Bengal	67,00,000	87,00,000
„ Central „	13,00,000	14,00,000
„ Northern „	11,00,000	17,00,000
„ Eastern „	23,00,000	37,00,000
„ Behar and Upper Provinces	7,00,000	5,00,000
„ Orissa	4,60,000	1,50,000
„ Chota Nagpore ... ..	.....	1,00,000
„ Assam	1,00,000	1,50,000
Imports unregistered	17,50,000	.....
Total	2,02,00,000	2,43,00,000

Wheat.—The great wheat fields of India are the North-Western Provinces, the Punjab, and the Central Provinces. The surplus produce of these places is mostly carried by railway to Bombay or Calcutta. In the Behar province, however, wheat is also an important food-staple, and there is a large surplus production. Bhagulpore is the chief wheat-producing district in Behar, and next comes Monghyr. In that part of the Lower Provinces which is called Bengal, to distinguish it from Behar, Orissa, and Chota Nagpore, wheat is not one of the chief articles of consumption; and the only districts from which it is exported in any appreciable quantity are Nuddea and Moorsheadabad, where the lands are high and the cold weather crops of more importance than is ordinarily the case in Bengal districts. The cultivation of Indian wheat has extended of late years from causes which need not be here specified.

The grand total of wheat imported into Calcutta during 1877-78 Imports by internal routes. amounted to 71,30,477 maunds, as against 64,83,931 maunds in the preceding year, as shown below:—

	1876-77.	1877-78.
	Mds.	Mds.
By rail	48,22,487	49,70,181
„ boat	16,60,404	21,42,142
„ steamer ... ..	.....	13,751
„ road	1,040	4,403
Total	64,83,931	71,30,477

In the following statement the imports of wheat into Calcutta are classified by provinces :—

	1877-78.
	Mds.
From North-Western Provinces and Oudh	31,38,034
Behar	20,03,787
Bengal	13,24,776
Punjab	6,19,630
Central Provinces	20,526
Bombay	5,953
Orissa	5,466
Rajpootana States	1,912
Madras	898
Assam	420
Other places	45
Total	71,30,477

The bulk of the imports was carried by the East Indian Railway, and the stations from which the largest quantities were consigned are shown below :—

Stations on the East Indian Railway.	What district.	Quantity. Mds.
Cawnpore	Cawnpore	8,30,800
Delhi	Delhi	2,41,400
Patna	Patna	2,32,000
Shahjehanpore	Shahjehanpore	1,65,100
Meerut City	Meerut	1,52,200
Lucknow	Lucknow	1,43,000
Mozuffernuggur	Mozuffernuggur	1,18,800
Chundowsie	Moradabad	1,14,000
Gazecabad	Meerut	1,04,600
Fyzabad	Fyzabad	1,04,200
Allyghur	Allyghur	91,700
Hattrass Road and Hat- trass City ... }	Ditto.	86,400
Umritsur ...	Umritsur	73,400
Loodhiana ...	Loodhiana	72,500
Saharanpore ...	Saharanpore	69,600
Hurdui ...	Hurdui	63,900
Barrh ...	Patna	51,200
Lahore ...	Lahore	50,700
Agra ...	Agra	55,500
Umballa Cantonment... }	Umballa	50,800
Ditto City ... }		

Along the Eastern Bengal Railway Kooshtea is credited with 2,05,700 maunds, Naraingunge with 94,800 maunds, Dacca 66,300 maunds, Goalundo 52,500 maunds, Serajgunge 33,900 maunds, and Allum dangah, in the Nuddea district, with 31,700 maunds.

The greater part of the wheat that comes to Calcutta by river is shipped at marts in the Bhagulpore, Monghyr, and Nuddea districts.

Principal river marts.

The wheat brought to Calcutta is chiefly intended for export by sea. The increase in exports, which dates from the year 1873-74, is worthy of attention. The following table shows the exports from Calcutta by sea to foreign ports during the past six years:—

Years.	Cwt.	Equivalent in maunds.	Years.	Cwt.	Equivalent in maunds.
1872-73	144,411	1,96,560	1875-76	1,330,822	18,11,398
1873-74	489,143	6,63,186	1876-77	3,871,114	52,85,635
1874-75	279,280	3,80,172	1877-78	4,544,392	61,85,433

The published accounts of the trade and navigation of the United Kingdom show the imports of wheat into Great Britain during the four past calendar years as follows:—

	1874. Cwt.	1875. Cwt.	1876. Cwt.	1877. Cwt.
From United States	23,048,552	23,463,910	19,299,785	21,308,667
" Russia	5,714,488	9,955,295	8,769,240	10,838,090
" British India	1,076,876	1,334,913	3,279,887	6,104,940
" Germany	3,453,680	6,615,984	2,324,148	5,455,763
" British North America	3,807,174	3,604,610	2,417,151	2,912,178
" Egypt	294,880	2,093,853	2,218,227	2,417,709
" France	300,209	1,296,920	293,350	1,494,783
" Turkey and Wallachia and Maldivia	659,676	1,308,137	1,238,851	1,253,018
" Chili	1,956,334	900,880	982,619	736,011
" Denmark	167,298	493,599	262,518	73,812
" Other countries	1,432,215	1,678,263	3,308,356	1,538,007
Total	41,479,460	51,746,393	44,394,152	51,102,888

It will be seen that during the past two years British India has occupied the third place among the countries of the world that supply Great Britain with wheat.

Exports by sea. During 1877-78 the exports from Calcutta by sea amounted to 4,741,454 cwt., or 64,53,646 maunds, namely—

	Cwt.	Mds.		Cwt.	Mds.
To foreign ports	4,514,399	61,85,433	To Indian ports	197,055	2,68,213

Out of this quantity 4,318,796 cwt., or 56,06,643 maunds, were sent to Great Britain.

Deducting the sea-borne exports from the total quantity imported into Calcutta during the past year, there remains a surplus of 6½ lakhs of maunds, as against 10½ lakhs in the previous year, for local consumption in Calcutta.

Pulses and gram.—Pulses form a most important article of food throughout the whole of Bengal and Behar. The principal pulses are *muttur*, *khesari*, *maskalai*, *moog*, *boot*, *chhola*, and *arhur*.

The total imports into Calcutta of pulses and gram registered during 1877-78, as compared with the figures of the previous year, are as follow:—

	1876-77. Mds.	1877-78. Mds.
By boat	24,37,100	28,40,557
" rail	11,24,692	18,75,254
" road	38,200	8,149
" steamer (including sea imports)	.....	6,570
Total	35,99,992	47,30,530

The sources of the supply, province by province, were as follow:—

					1877-78.
					Mds.
From Bengal	...	...	...	...	24,93,072
" Behar	...	...	...	...	18,65,408
" North-Western Provinces and Oudh	...	...	...	...	3,08,334
" Punjab	...	...	...	...	49,676
" Central Provinces	...	...	...	...	8,564
" Madras	...	...	...	...	3,574
" Chota Nagpore	...	...	...	...	912
" Rajpootana State	...	...	...	...	591
" Bombay	...	...	...	...	193
" Other places	...	...	...	...	206
Total					47,30,530

The principal supplying district is Nuddea, which contributed 11,16,700 maunds. Next to Nuddea is Patna, from which 8,18,500 maunds were consigned. The imports from Monghyr were 5,54,900 maunds, and from Moorshedabad 3,60,400 maunds.

The total exports by sea were 32,75,853 maunds, or 2,406,748 cwt., as follows:—

					1877-78.	
					Mds.	Cwts.
To foreign ports	...	...	...	...	8,39,051	616,445
" Indian "	...	...	...	...	24,36,802	1,790,303
Total					32,75,853	2,406,748

Out of 47½ lakhs of maunds imported into Calcutta as much as 32½ lakhs were exported by sea and 2½ lakhs by internal routes in the interior, and 12 lakhs remained for consumption in the metropolis, as against 15 lakhs in the previous year.

Miscellaneous spring and rain crops.—Under this heading are comprised barley, kodo, cheena, shama, Indian corn, oats, millets, and other crops, which are reaped during the spring and rainy seasons. They form an important part of the food-supply of the Behar people.

The following statement illustrates the registered imports into Calcutta during 1877-78, as compared with the imports by internal routes, of the preceding year:—

Specification of routes.	Miscellaneous spring crops.	Miscellaneous rain crops.	Other food-grains.	Grand Total
	Mds.	Mds.	Mds.	Mds.
By boat ... { 1876-77 ...	2,35,300	8,500	.....	2,43,800
{ 1877-78 ...	2,56,967	6,195	.....	2,63,162
" rail ... { 1876-77 ...	Particulars not available {			1,07,300
{ 1877-78 ...				1,37,184
" steamer ... 1877-78 ...	"	"	6,093	6,093
Total ... { 1876-77 ...	2,35,300	8,500	1,07,300	3,51,100
{ 1877-78 ...	2,56,967	6,195	1,43,577	4,06,739

The sources of the supply, province by province, are as follows:—

	Mds.		Mds.
From Behar	... 2,41,627	From Chota Nagpore	... 412
„ Bengal	... 1,17,445	„ Assam	... 400
„ North-Western	... 29,011	„ Bombay	... 247
„ Provinces	... 10,697	„ Other places	... 1,210
„ Punjab	... 4,848		
„ Madras	... 842	Total	... 4,06,739
„ Central Provinces			

The bulk of the supply was obtained from Patna, Shahabad, Nuddea, Bhagulpore, and Moorshedabad, which together supplied over 2½ lakhs of maunds.

The principal river marts are Seenaha (27,900 maunds), Buhooara (27,800 maunds), Patna (23,900 maunds), Dhublian (20,400 maunds), Colgong (12,000 maunds), and Revelgunge (11,700 maunds).

The principal supplying stations on the railway lines are Patna (40,900 maunds) and Kooshtea (12,300 maunds).

The grand total of exports by sea amounts to 235,065 cwt., or 3,19,950 maunds, distributed as follows:—

	Cwt.	Mds.
To foreign ports	... 124,240	1,69,105
„ Indian „	... 110,825	1,50,845

The registered imports into Calcutta are 4,06,739 maunds; the exports by sea are 3,19,950 maunds; the difference, amounting to 86,789 maunds, is the quantity left for local consumption.

Jute.—The cultivation of jute for the production of fibre is one of the most important occupations of the Bengal ryot. Jute thrives on almost every description of soil except laterite, and the seasons for sowing and growth are the same as those for the *aus* or early rice crop. North-Eastern and Eastern Bengal, and more especially the districts of Mymensingh, Dacca, Rungpore, and Pubna, comprise the tracts where the jute plant is most extensively produced.

The great bulk of the jute produced in these tracts is brought to Calcutta by country boats, by steamer, and by railway, and is then exported to Europe.

The total quantity of raw jute imported into Calcutta amounted during the past year to 1,00,92,662 maunds, as against 83,03,913 maunds in 1876-77. A larger portion of the total imports is carried by country craft than by any other means of conveyance. There has also been a considerable increase in the railway traffic on the Eastern Bengal line. The quantities carried by this Company were 39,77,661 maunds, as against 33,82,406 maunds in the preceding year. In the calendar year 1874 the total railway traffic was 30,58,716 maunds, and in 1875, 26,32,143 maunds. Of the river-borne imports the largest portion, amounting to more than 25½ lakhs of maunds, was shipped from the marts in the Dacca and Pubna districts.

Mymensingh, Rajshahye, Furreedpore, Jessore, and Dinagore supplied altogether 14½ lakhs by country boats. In the case of Dinagore the exports were very much less in the past year; the rice exports from this district during the year were, however, unusually heavy. The road imports were almost entirely derived from the 24-Pergunnahs.

Principal river marts.

The principal river marts which supplied jute to Calcutta direct during the year under review are—

Name of mart.	In what district.	Quantity. Mds.
Serajunge ...	Pubna ...	9,82,500
Naraingunge ...	Dacca ...	9,73,100
Madaripore ...	Furreedpore ...	2,87,300
Booridoh ...	Rajshahye ...	1,89,700
Dacca ...	Dacca ...	1,18,900
Nussirabad ...	Mymensingh ...	1,02,600
Boidyabatty ...	Hooghly ...	74,400
Jessore ...	Jessore ...	56,200
Lakpore ...	Dacca ...	51,000
Nagurpore ...	Mymensingh ...	50,600
Raigunge ...	Dinagore ...	48,000
Kaligunge ...	Dacca ...	46,800
Pangasce ...	Pubna ...	45,800
Shumbhoogunge ...	Mymensingh ...	43,400
Koringunge ...	Ditto ...	41,900
Bhuddressur ...	Hooghly ...	41,000
Gheor ...	Dacca ...	40,700
Chattrra ...	Hooghly ...	40,500
Kaligunge ...	Mymensingh ...	39,900
Khoksa Janipore ...	Nuddea ...	36,300
Syedpore ...	Furreedpore ...	32,200
Maldah ...	Maldah ...	32,600

Principal railway stations.

The quantity carried by rail was chiefly despatched from the undermentioned stations:—

Name of station.	In what district.	Quantity. Mds.
Goalundo ...	Furreedpore ...	20,95,500
Naraingunge ...	Dacca ...	7,59,400
Serajunge ...	Pubna ...	6,11,800
Dacca ...	Dacca ...	2,17,400
Pangsha ...	Furreedpore ...	1,17,300
Kooshtea ...	Nuddea ...	1,07,600

The quantities credited in favour of Serajunge, Naraingunge, Goalundo, and Kooshtea, however, are not for the most part the produce of the respective districts in which these marts are situated. These stations are merely the depôts to which jute is brought from neighbouring districts for consignment to Calcutta. During the first nine months of the past official year the imports of jute from these places into Calcutta by all sources were as follow:—

IMPORTS INTO CALCUTTA—				
	By boat.	By rail.	By steamer.	Total.
	Mds.	Mds.	Mds.	Mds.
From Serajunge ...	6,08,000	4,49,529	8,75,064	14,32,593
„ Naraingunge ...	8,86,883	5,00,313	2,64,462	16,51,657
„ Goalundo ...	1,622	17,78,408	4,014	17,83,942
„ Kooshtea ...	1,771	89,373	6,836	97,279
				2 E

Principal stations on
steamer routes.

The supply imported by river steamers was
chiefly shipped at the following places:—

				Mds.
Serajunge	...	...	...	5,62,100
Naraingunge	...	...	...	4,04,500
Kaligunge (in Rungpore)	...	...	...	55,400

Principal marts on road
routes.

The road importations were derived mostly
from Baraset (1,10,000 maunds) and Busseerhat
(58,700 maunds), within the 24-Pergunnahs
district.

The total exports of raw jute from Calcutta amounted during the
year to 5,401,639 cwt., or 73,52,243 maunds, as
against 4,571,889 cwt., or 62,25,852 maunds, in
the preceding year. The destination of the exports during 1877-78
was—

			Cwt.	Mds.
To foreign ports	...	...	5,319,318	72,40,196
„ Indian „	...	...	82,321	1,12,047

The yearly fluctuations of the export jute trade of Calcutta will
be seen from the following figures, showing the quantities of raw jute
shipped from Calcutta by sea during the past six years:—

	Cwt.	Mds.	Value. Rs.
1872-73	7,061,951	1,16,12,084	4,12,79,439
1873-74	6,126,120	83,33,329	3,43,55,139
1874-75	5,499,788	74,85,822	3,24,49,941
1875-76	5,206,521	70,86,653	2,80,52,933
1876-77	4,574,097	62,25,852	2,66,48,844
1877-78	5,401,639	73,52,243	3,50,82,696

The falling off in the exports which has been observed for some
years past was checked during the year under review.

It will be seen that while the total imports into Calcutta amounted
in round numbers during the year to 101 lakhs,
the total exports were 73½ lakhs, leaving a balance
of 27½ lakhs for local consumption in Calcutta and
its neighbourhood. Allowing two lakhs of maunds for wastage and
cuttings in the suburban jute mills, there remained a net surplus of
over 25½ lakhs of maunds available for local demand.

In the preceding year it was ascertained that there were about
4,000 looms at work in the jute mills in Calcutta and its neighbour-
hood, and that each loom consumed on an average about 550 maunds of
raw jute in the year, or 22 lakhs of maunds by all looms per year.
Taking a maund of raw jute from 35 to 40 bags, the production of the
jute mills was estimated at from 80 to 88 million bags.

Gunny-bags.—The total registered imports of gunny-bags into Calcutta during the past year, as compared with the trade of the preceding year, are shown below :—

Imports by all routes.

Specification of routes.	Imports into Calcutta.	
	In 1876-77.	In 1877-78.
	Number.	Number.
By boat ...	12,163,002	16,403,270
„ Eastern Bengal Railway ...	4,759,305	3,157,000
„ East Indian Railway ...	581,423	462,455
„ South Eastern State Railway ...	770	560
„ road ...	.....	27,251
„ sea ...	61,500	1,395,956
Total ...	17,566,000	21,446,492

Principal exporting districts.

The chief exporting districts, as shown by the registration returns, are the following :—

Name of district.	NUMBER OF BAGS.		
	Power-loom.	Hand-made.	Total.
Hooghly	6,979,933	1,276,936	8,256,869
Dinapore ... ..	.....	3,789,704	3,789,704
24-Pergunnahs	2,807,698	291,228	3,101,926
Pubna	2,950,625	.....	2,950,625
Purneah ... ..	.....	494,230	494,230
Julpigoree ... ..	.....	388,910	388,910
Tipperah ... ..	.....	142,700	142,700

The total export of gunny-bags from Calcutta consisted of 57,869,420 bags despatched by sea for European consumption, and 20,671,934 bags sent by rail, 758,098 bags by boat, and 84,777 bags by road, to meet local consumption in the interior of the country, or a total of 79,384,229 bags by all routes.

Of the export by sea 52,867,892 were power-loom bags and 5,001,528 hand-made bags, the total being 57,869,420 bags, as against 72,969,600 bags in the preceding year. The distribution of the exports during the past year was as follows :—

	Power-loom. Number.	Hand-made. Number.	Total Number.
To Indian ports, viz.—			
Madras	170,700	7,500	178,200
Other ports in Madras ...	2,383,463	.....	2,383,463
Bombay	11,806,125	4,136,000	15,942,125
Other ports in Bombay ...	276,200	.....	276,200
British Burmah	11,811,710	.....	11,811,710
Other Indian ports	2,002,725	181,028	2,183,753
Total of interportal trade ...	28,450,923	4,324,528	32,775,451
To foreign ports, viz.—			
United Kingdom	496,496	.....	496,496
Other foreign ports	23,920,473	677,000	24,597,473
Total of foreign trade	24,416,969	677,000	25,093,969
GRAND TOTAL	52,867,892	5,001,528	57,869,420

The stock for local consumption in Calcutta may be set down at 22 million bags in 1877-78, as against 19 million bags in the preceding year. The trade for the past year is shown in the memorandum given below:—

<i>Memorandum.</i>		Number.
Number of bags imported during 1877-78	...	21,446,492
Number obtained by local manufacture during the year in the jute mills in Calcutta and its neighbourhood (less eight million power-loom bags already registered during the year)	...	80,000,000
	Total	101,446,492
Deduct exports by all routes	...	79,384,229
Number available for local consumption	...	22,062,263

Gunny-cloth.—The total import of hand-made gunny-cloth amounted during the past year to 50,355 pieces, as against 226,100 pieces in the preceding year, each piece containing twenty yards. The places from which the supply was derived in 1877-78 were as follow:—

				Number of pieces.
Dinagapore—				
Nayabandar	...	...	38,000	} 38,650
Balooghut	...	...	250	
Rangamatia	...	...	200	
Ghoraghat or Jellin Bazar	...	...	150	
Other places	...	...	50	
Hooghly—				
Futtehpore	...	...	2,475	} 2,899
Chatra	...	...	269	
Other places	...	...	155	
Burdwan—				
Culna	...	...	2,550	2,550
Moorshedabad—				
Jungypore	...	...	1,000	1,000
Other places	...	...	...	5,256
		Total	...	50,355

The exports from Calcutta by sea during the past year were 4,071,115 yards of power-loom cloth; no hand-manufactured cloth was exported.

Linseed.—Linseed is the most important of all the oil-seeds exported from this country. It is cultivated to a far greater extent in Behar and the North-Western Provinces than in Bengal, the low and damp districts of Lower Bengal (except Nuddea, where the lands are high) not being suited to its growth.

1877-78.]

TRADE.

The imports into Calcutta during 1877-78, as compared with the imports of the preceding year, are shown below :—

	1876-77. Mds.	1877-78. Mds.
By boat	25,19,300	35,41,800
„ rail	24,02,900	34,96,800
„ road	43,000	29,800
„ steamer	2,800	8,300
„ sea		700
Total	49,68,000	70,77,400

The sources of the supply, province by province, are as follow

	Into Calcutta.	
	1876-77. Mds.	1877-78. Mds.
From Behar	23,45,300	36,34,300
North-Western Provinces	14,13,300	16,03,500
Bengal	11,26,400	14,69,500
Assam	34,800	36,600
Oudh	25,300	1,70,600
other provinces ...	22,900	1,62,200
Indian and foreign ports, by sea		700
Total	49,68,000	70,77,400

The principal districts supplying Calcutta are Patna (19,04,200 maunds), Cawnpore (6,65,100 maunds), Nuddea (4,92,700 maunds), Durbhunga (4,38,400 maunds), Sarun (4,20,200 maunds), Hooghly (3,20,900 maunds), Bhagulpore (2,81,400 maunds), Goruckpore (2,48,000 maunds), Monghyr (2,34,900 maunds), and Furreedpore (2,28,200 maunds).

Nuddea is the only district of Lower Bengal in which the cultivation of linseed is considerable. In a great part of the district the lands are high and the cold-weather crops of more importance than rice.

The exports of linseed by sea during 1877-78, as compared with the figures of the previous seven years, are as follow :—

Years.	Quantity.	
	Cwt.	Mds.
1870-71	3,273,364	44,55,412
1871-72	2,806,705	38,20,238
1872-73	2,154,475	29,32,480
1873-74	2,297,860	31,27,643
1874-75	2,794,557	38,03,703
1875-76	4,117,955	56,04,999
1876-77	3,524,451	47,97,164
1877-78	5,199,390	70,76,947

The destination of the exports during the past year, as compared with the trade of the preceding year, is as follows:—

	1876-77.		1877-78.	
	Cwts.	Mds.	Cwt.	Mds.
To foreign ports—				
United Kingdom ...	2,748,694	37,41,235	4,383,241	59,66,078
Other ports ...	775,757	10,55,893	816,120	11,10,830
Total ...	3,524,451	47,97,178	5,199,361	70,76,908
To Indian ports—				
Pondicherry ...	.....	.....	22	30
Other ports ...	24	32	7	9
Total ...	24	32	29	39
Grand Total ...	3,524,475	47,97,210	5,199,390	70,76,947

The chief consuming countries are North America and the United Kingdom.

Deducting the sea-borne exports from the quantity imported by internal routes, there remains a balance of only 197 maunds, as against 1,72,000 maunds in the preceding year.

Mustard and rape-seed.—In Lower Bengal mustard-seed is of greater importance than linseed, and the cultivation is increasing; mustard-oil is also the oil which is most largely consumed by the people. It is extensively cultivated in the Upper Provinces.

The registered imports into Calcutta during 1877-78, as compared with the figures of the preceding year, are as follow:—

	1876-77.	1877-78.
	Mds.	Mds.
By rail	12,66,500	18,66,700
„ boat	12,08,900	15,39,500
„ steamer	96,800	1,63,700
„ road	800	2,600
Total	25,73,000	35,62,500

The entire supply was derived from the provinces mentioned below:—

	1876-77.	1877-78.		1876-77.	1877-78.
	Mds.	Mds.		Mds.	Mds.
From Behar ...	6,71,600	17,23,600	From Oudh ...	24,400	80,200
„ North-Western Provinces.	4,21,900	8,62,600	„ other provinces ...	1,80,400	15,000
„ Bengal ...	8,31,000	6,99,200	Total ...	25,73,000	35,62,500
„ Assam ...	4,33,600	2,41,900			

Of all the supplying districts Patna contributed the largest quantity, namely 8,05,800 maunds, Cawnpore supplied 4,34,100 maunds, Furreedpore 2,73,700 maunds, Duxbhunga 2,04,600 maunds, Bhagulpore 1,98,900 maunds, Kamroop 1,54,200 maunds, Sarun 1,47,100 maunds, Monghyr 1,23,400 maunds, Pubna 1,16,300 maunds, Hooghly 1,06,400 maunds, and Purneah 1,04,400 maunds.

The exports of mustard-seed and rape-seed by sea during 1877-78, as compared with the figures of the previous seven years, are as follow:—

Years.	Quantity.		Years.	Quantity.	
	Cwt.	Mds.		Cwt.	Mds.
1870-71	2,085,488	28,38,581	1874-75	439,426	5,98,108
1871-72	1,131,316	15,39,847	1875-76	905,926	12,33,066
1872-73	27,056	36,826	1876-77	1,097,991	14,94,490
1873-74	100,508	1,36,803	1877-78	1,857,548	25,28,334

These figures show remarkable fluctuations year by year.

The destination of the exports during the past two years was as follows:—

	1876-77.		1877-78.	
	Cwt.	Mds.	Cwt.	Mds.
To foreign ports—				
United Kingdom	983,044	13,38,034	1,633,611	22,23,529
Other ports	114,601	1,55,985	220,405	2,99,998
Total	1,097,645	14,94,019	1,854,016	25,23,527
To Indian ports—				
Madras	345	470	3,293	4,489
Other ports	1	1	239	325
Total	346	471	3,532	4,814
Grand Total	1,097,991	14,94,490	1,857,548	25,28,334

The surplus of imports over exports by sea amounted to 10,34,166 maunds, as against 10,78,512 maunds in the previous year.

Indigo.—As explained, in the last report, indigo is cultivated in the districts of Nuddea and Jessore, and throughout Central Bengal, and largely in most of the districts of Behar, as well as in the districts lying immediately east of that province.

The total registered imports into Calcutta by the several routes amounted during 1877-78 to 1,80,058 maunds, as against 1,19,600 maunds in the preceding year as shown below:—

Imports by internal routes.		In 1876-77.	In 1877-78.
		Mds.	Mds.
By East Indian Railway	...	1,04,970	1,64,325
„ Eastern Bengal Railway	...	10,200	10,331
„ country boats	...	4,430	5,295
„ steamer	...	.....	99
„ road	...	.....	8
Total	...	1,19,600	1,80,058

The following statement shows the imports into Calcutta, province by province :—

	1876-77.	1877-78.
	Mds.	Mds.
From Behar	64,790	1,13,376
„ North-Western Provinces ...	37,496	47,812
„ Bengal	15,797	16,819
„ Oudh	1,350	1,039
„ Punjab	156	92
„ Central Provinces	11	50
„ Unspecified districts in Upper Provinces ... ..	.....	870
Total	1,19,600	1,80,058

The exports by sea from Calcutta during the year 1877-78 amounted to 99,513 cwt., or 1,35,448 maunds, as against 69,156 cwt., or 94,130 maunds, in the preceding year.

Deducting the exports from the imports, there remained 44,610 maunds. It will, however, be remembered that as regards the railway figures the “actual gross weight of each consignment (not always of each commodity) is shown on invoices.” In order, therefore, to ascertain the actual weight of indigo carried by rail, a deduction would have to be made on account of the weight of the chests containing the indigo.

Indian tea.—The bulk of the tea which finds its way into the Calcutta market comes from the tea-growing districts of Assam. Tea is also cultivated to a greater or less extent in the Cooch Behar, Dacca, Chittagong, and Chota Nagpore Divisions. The quantity of tea produced is steadily increasing. The value of the tea exported during the past year amounted to more than three millions sterling.

The total quantity of tea imported into Calcutta during the year 1877-78, as compared with the imports of the preceding year, was as follows :—

Specification of routes.	1876-77.		1877-78.	
	Mds.	lb	Mds.	lb
By river steamers ...	2,66,114	21,337,120	3,18,420	25,473,600
„ East Indian Railway ...	82,661	6,612,880	1,05,938	8,475,040
„ Eastern Bengal Railway...	12,694	1,015,520	12,866	1,029,280
„ Country boats ...	1,113	89,040	7,700	616,000
Total ...	3,63,182	29,054,560	4,44,924	35,593,920
By sea ...	6,469	517,501	6,117	489,386
Grand Total ...	3,69,651	29,572,061	4,51,041	36,083,306

The sources of supply, classified by provinces, were—

				In 1877-78.	
				Mds.	lb
From Assam	...	...	3,25,489	26,039,120	
„ Behar	...	...	85,829	6,866,320	
„ Bengal	...	...	14,306	1,144,480	
„ North-Western Provinces	...	...	9,840	787,200	
„ Punjab	...	...	8,557	684,560	
„ Chota Nagpore	...	...	894	71,520	
„ Bombay	...	...	9	720	
Total	...	...	4,44,924	35,593,920	

According to the Calcutta Custom House returns the quantity of tea imported from Chittagong into Calcutta amounted during 1877-78 to 481,980lb, but the returns of the Chittagong port for that year show an exportation of 608,970lb. The discrepancy is apparently due to short shipments, which were not noticed by the Collector of Customs at Chittagong during the first seven months of the year.

The exports from Calcutta by sea were 33,519,239lb, or 4,18,990 maunds, as against 27,686,488lb, or 3,46,081 maunds, in the preceding year. Of the exports during the past year, 33,133,438lb went to Great Britain. The following comparative statement shows the quantity of China and Indian teas sent to Great Britain since the calendar year 1868:—

Years.	Export from China.	Export from British India.
	lb	lb
1868	142,117,286	9,095,414
1869	126,482,613	11,241,070
1870	125,593,898	12,923,993
1871	151,636,036	15,150,958
1872	160,520,882	16,445,970
1873	Not available.	
1874	131,659,998	18,440,494
1875	170,966,836	25,784,866
1876	155,897,192	28,126,854
1877	153,379,753	31,245,251

The excess of imports over exports by sea, which was available for local consumption in Calcutta, amounted during the past year to 2,562,691lb, or 32,034 maunds, as against 1,885,573lb, or 23,750 maunds in the preceding year.

Silk.—The production of silk in Bengal is still an important industry. Its principal seat extends over a considerable part of the Rajshahye and Burdwan Divisions and the district of Moorshedabad. A large quantity of raw silk is locally consumed in the manufacture of silk cloth and in other ways, but as a rule the silk reeled off in European factories is sent to Europe.

The total registered import into Calcutta during 1877-78, as compared with the trade of the preceding year, was as follows:—

		1876-77.	1877-78.
		Mds.	Mds.
By rail	...	17,132	16,579
„ boat	...	5,165	6,240
„ road	...	10	1,595
„ steamer	...	309	150
Total	...	22,616	24,564
By sea	...	1,674	2,834
Grand Total	...	24,290	27,398

It will be seen that imports were largest by rail, but the quantity carried during the past year was slightly below that of the preceding year, while the imports by boat showed a slight increase. The imports by sea, amounting to 2,834 maunds, were principally derived from Hong-Kong (2,445 maunds).

The exports by sea during 1877-78 amounted to 2,179,838lb, or 27,248 maunds, as against 1,829,840lb, or 22,873 maunds, in the preceding year. The silk exported during the past year was distributed as follows:—

Exports from Calcutta in 1877-78.

		lb	Mds.
To United Kingdom	...	677,111	8,168
„ other foreign ports	...	817,506	10,219
Total	...	1,494,950	18,687
To Madras	...	586,735	7,331
„ other ports in Madras	...	20,507	257
„ Bombay	...	39,182	490
„ British Burmah	...	8,705	108
„ other Indian ports	...	29,759	372
Total	...	684,888	8,561
Grand Total	...	2,179,838	27,248

The value of the sea exports of silk from Calcutta during the past five years was—

		Rs.
1873-74	...	1,13,43,000
1874-75	...	76,24,400
1875-76	...	41,10,800
1876-77	...	93,97,200
1877-78	...	1,12,04,180

Deducting the exports from the imports there remained in the past year only 150 maunds, as against 1,417 maunds in the previous year.

Cotton, raw.—As noticed in last year's Report, the cultivation of cotton is not of much importance in any part of Bengal, with the exception of the hills in the Eastern Frontier, including the Tipperah, Looshai, Khasi, and Chittagong Hills, and possibly also parts of Julpigoree.

There is no attempt on the part of the cultivators to extend or improve the cultivation, and this article is gradually, but surely, being driven out of the market by the introduction and increasing use of foreign twist and cloth. There is, however, a considerable sea export trade in cotton from Calcutta. The land imports, which are large, are exclusively from the North-Western Provinces and the Punjab, and chiefly by the East Indian Railway.

The imports into Calcutta during 1877-78, as compared with the figures of the preceding year, are given below:—

Imports by internal routes.		In 1876-77.	In 1877-78.
		Mds.	Mds.
By rail	...	4,61,161	1,95,120
„ sea	...	1,54,275	1,55,261
„ boat	...	8,023	15,667
„ road	...	1,744	3,035
„ river steamer	...	.....	195
Total		6,25,203	3,69,281

The enormous decrease in the imports during the past year is owing to the serious failure of the crop in the usual exporting districts. The imports by sea comprised 1,26,764 maunds despatched from Bombay, 10,946 maunds from Madras, and 17,513 maunds from British Burmah.

The export of cotton from Calcutta by all routes amounted to 1,80,024 maunds, as shewn below:—

Exports by all routes.		In 1876-77.	In 1877-78.
		Mds.	Mds.
By sea	...	4,23,586	1,33,875
„ country boats	...	64,409	13,515
„ rail	...	18,971	25,199
„ road	...	3,231	7,692
„ steamer	...		12
Total		5,10,197	1,80,293

The sea-borne exports were thus distributed—

Exports by sea.		Cwt.	Mds.	To Indian ports—		Cwt.	Mds.
To foreign ports—				Bombay		2,279	3,102
United Kingdom	..	23,069	31,398	Other Indian ports		482	656
Other ports	..	72,527	98,719				
Total	..	95,596	1,30,117	Total		2,761	3,753
				Grand Total		98,357	1,33,875

Deducting the exports from the imports, a surplus of 1,88,988 maunds, as against 1,15,066 maunds in 1876-77, was left for local consumption in the cotton-mills established in the vicinity of Calcutta.

Saltpetre.—The saltpetre brought to Calcutta is chiefly produced in the northern and western districts of Behar. A large quantity is also brought from the North-Western Provinces.

The total quantity of saltpetre imported into Calcutta amounted during the past year to 6,30,294 maunds, as against 6,18,900 maunds in the preceding year. The following statement shows the imports of saltpetre into Calcutta since the year 1872:—

	Years.	By river.		By rail.		Total.
		Mds.		Mds.		Mds.
Calendar year	{ 1872	...	3,23,000	2,96,316		6,19,316
	{ 1873	...	3,23,800	3,59,276		6,83,076
	{ 1874	...	3,06,000	3,63,501		6,69,501
	{ 1875	...	Not available.	4,33,677	Not available	
Financial year	{ 1876-77	...	1,00,500	5,18,400		6,18,900
	{ 1877-78	...	70,167	5,60,127		6,30,294

The steady increase in the imports by rail year by year shown in the above statement is satisfactory.

The following table gives an abstract of the imports, province by province, during the past two years:—

			1876-77.	1877-78.
			Mds.	Mds.
From Behar districts	...	...	4,69,500	4,93,400
„ North-Western Provinces	...	...	1,20,800	98,590
„ Punjab	„	...	24,400	32,668
„ Bengal	„	...	2,700	3,341
„ Oudh	„	...	1,100	1,343
„ Central	„	...	400	.....
„ unspecified districts	...	...	.....	952
Total		...	6,18,900	6,30,294

The Custom House returns show that 390,659 cwt., or 5,31,730 maunds, of saltpetre were exported from Calcutta during 1877-78, as against 464,174 cwt.,

or 6,31,790 maunds, in the preceding year. The destination of the exports during the past year was—

To foreign ports—

	Cwt.	Mds.
United Kingdom ...	217,856	2,96,527
Other foreign ports	170,780	2,32,451
Total	388,636	5,28,978

To foreign ports—

	Cwt.	Mds.
Madras ports ...	919	1,249
Bombay ...	723	985
Other Indian ports	381	518
Total	2,023	2,752

Grand Total ... **390,659** **5,31,730**

The sea exports from Calcutta since 1871-72 are given below for convenience of comparison:—

Official year.	Cwt.	Equivalent in mds.	Official year.	Cwt.	Equivalent in mds.
1871-72 ...	421,638	5,77,980	1875-76 ...	400,735	5,45,415
1872-73 ...	500,199	6,80,826	1876-77 ...	464,174	6,31,790
1873-74 ...	414,293	6,01,732	1877-78 ...	390,659	5,31,730
1874-75 ...	510,331	7,35,150			

The surplus of imports over exports by sea amounted during the past year to 98,564 maunds, as against a deficit of 12,888 maunds in the preceding year.

Cotton (European) piece-goods.—Cotton piece-goods are imported into Calcutta by sea, and are thence distributed to meet local requirements in the interior of the country. The registration of this article is effected by values. The valuations given below are declared values in all cases, save as regards goods carried by railway. The piece-goods carried by railway are registered by weight only, and the values are calculated at Rs. 80 per maund, being the average price in Bengal of piece-goods of all sorts.

The grand total of European cotton piece-goods sent from Calcutta into the interior of the country during 1877-78 was valued at Rs. 12,23,06,463, as against Rs. 11,55,39,052 in the preceding year. The following comparative statement shows the several routes followed by the trade for the past two years:—

			Exports from Calcutta.	
			In 1876-77.	In 1877-78.
			Rs.	Rs.
By rail	...	...	9,38,75,600	10,17,49,722
„ sea	...	...	1,02,41,052	91,99,250
„ river steamers	...	...	56,63,200	67,21,761
„ boat	...	...	35,57,100	32,32,283
„ road	...	...	18,02,100	14,03,445
Total	...	...	11,55,39,052	12,23,06,463

The statistics of the rail-borne traffic, however, are not perfectly accurate, inasmuch as there is no record kept to distinguish between

European and country piece-goods. The matter is still the subject of correspondence between the Government of India and East Indian Railway Company. The distribution of the entire traffic, province by province, was as follows :—

				Exports from Calcutta. 1877-78.
				Rs.
To Bengal districts ...	...	...	...	3,69,70,996
Behar ...	...	...	...	3,17,57,200
North-Western Provinces and Oudh ...	...	...	...	2,31,74,635
Punjab ...	...	...	...	1,31,00,443
Assam ...	...	...	...	43,91,839
Rajpootana States ...	...	...	...	11,68,054
Central Provinces ...	...	...	...	10,86,852
Orissa and Chota Nagpore ...	...	...	...	8,75,216
Bombay ...	...	...	...	2,73,202
Nizam's Territory ...	...	...	...	8,776
Total of Inland exports ...				11,31,07,213
To Chittagong, Orissa, and other ports by sea ...				91,99,250
Grand Total ...				12,23,06,463

Of the inland exports, valued at $11\frac{1}{2}$ crores, it will be seen that piece-goods valued at nearly $1\frac{1}{2}$ crores were exported by river and road ; the remainder, valued at about 10½, went by rail. In addition to the above about 92 lakhs worth was sent by sea to the ports of Chittagong and Orissa.

The distribution of piece-goods to the provinces, which are not exclusively dependent on Calcutta for their supply, was as follows :—

Names of importing districts.				Gross import from Calcutta direct. 1877-78.
NORTH-WESTERN PROVINCES.				Rs.
Agra ...	Agra ...	...	...	6,59,730
Allahabad ...	{ Cawnpore ...	...	...	95,67,116
	{ Allahabad ...	...	...	8,23,518
	{ Jaunpore ...	...	...	35,486
	{ Banda ...	...	...	27,666
Benares ...	{ Benares ...	...	...	69,43,660
	{ Mirzapore ...	...	...	18,87,170
	{ Ghazipore ...	...	...	14,35,862
	{ Alighur ...	...	...	10,72,462
	{ Muttra ...	...	...	1,13,880
	{ Azimgur ...	...	...	1,04,132
" "	{ Goruckpore ...	...	...	18,800
	{ Other districts ...	...	...	2,22,140
Total ...				2,29,11,652
OUDH.				
Sultanpore ...	Akbarpore ...	...	...	2,07,234
Lucknow ...	{ Lucknow ...	...	...	29,040
	{ Other districts ...	...	...	26,709
Total ...				2,62,983

Names of importing districts.			Gross import from Calcutta direct. 1877-78.
OTHER PROVINCES.			
The Punjab (by rail)	...	...	1,34,00,413
Rajpootana States (by rail)	...	...	11,68,054
Central Provinces ( " )	...	...	10,86,852
Bombay ( " )	...	...	2,73,202
Nizam's Territory ( " )	...	...	8,776
Total			1,59,37,327
Grand Total			3,91,11,962

The following are the chief stations on the railway to which piece-goods were consigned:—

Along the East Indian Railway Line.

Name of station.	In what district.	Value. Rs.
Patna <i>cum</i> Bankipore and		
Dinapore	Patna	1,26,70,817
Delhi	Delhi	84,14,112
Zamaneah	Benares	38,03,760
Caragola	Purneah	35,80,343
Benares	Benares	30,80,608
Unritsar	Unritsar	27,91,020
Rajmehal	Sonthal Pergunnahs	27,38,226
Azingunge	Moorshedabad	19,91,530
Bhagulpore	Bhagulpore	19,56,171
Mirzapore	Mirzapore	17,73,844
Rancegunge	Burdwan	14,51,050
Barrh	Patna	14,35,272
Jhelum	Jhelum	14,25,283
Ghazipore	Ghazipore	13,78,154
Monghyr	Monghyr	13,69,970
Burdwan	Burdwan	12,39,086
Colgong	Bhagulpore	10,88,132
Arrah	Shahabad	9,35,620
Allahabad	Allahabad	6,99,924
Agra	Agra	6,58,186
Sahebgunge	Sonthal Pergunnahs	6,40,394
Jubbulpore	Jubbulpore	5,91,138
Doomraon	Shahabad	5,88,766
Burrakur	Manbhoom	5,47,724
Pakour	Sonthal Pergunnahs	4,73,240
Mokameh City	Patna	4,46,916
Mooraroe	Moorshedabad	4,15,163
Buxar	Shahabad	3,94,156
Cynthia	Beerbhoom	3,80,648
Roghoonathpore	Shahabad	3,47,354
Bechea	Ditto	3,24,572
Giridee	Hazareebagh	3,17,692
Jullundur City	Jullundur	2,89,554
Bucktearpore	Patna	2,78,158
Luckhiserai	Monghyr	2,31,682
Jamui	Ditto	2,29,238
Paneeghur	Burdwan	2,24,284
Bhulpore	Beerbhoom	2,21,250

Along the East Indian Railway Line—concluded.

Name of station.	In what district.	Value. Rs.
Rampore Haut ...	Moorshedabad ...	1,84,654
Ahmoodpore ...	Beerbhoom ...	1,77,960
Boidyanath ...	Sonthal Pergunnahs ...	1,71,804
Mooltan ...	Mooltan ...	1,69,302
Ditto (cantonment) ...	Ditto ...	1,59,017
Nulhattee ...	Moorshedabad ...	1,35,092
Bahawa ...	Sonthal Pergunnahs ...	1,23,262
Ghooskarah ...	Burdwan ...	1,15,963
Muttra ...	Muttra ...	1,10,234

Along the Eastern Bengal Railway Line.

Name of station.	In what district.	Value. Rs.
Dacca ...	Dacca ...	47,96,740
Naraingunge ...	Ditto ...	38,73,841
Kooshtea ...	Nuddea ...	36,54,458
Goalundo ...	Furreedpore ...	34,11,102
Serajgunge ...	Pubna ...	31,82,164
Chogdah ...	Nuddea ...	10,44,496
Kishengunge ...	Ditto ...	6,47,734
Coomercolly ...	Ditto ...	5,28,872
Buggoolau ...	Ditto ...	4,17,528
Damookdea ...	Ditto ...	3,99,360
Choodangah ...	Ditto ...	3,98,272
Allumdangah ...	Ditto ...	2,66,669
Ranaghat ...	Ditto ...	1,32,762
Pangsa ...	Furreedpore ...	1,19,882

Principal river marts.

The principal river marts importing piece-goods to the extent of Rs. 50,000 and upwards are given below:—

Name of mart.	On what river.	By boat. Rs.	By steamer. Rs.	Total. Rs.
Sylhet ...	Soorma ...	.....	16,18,826	16,18,826
Kaligunge ...	Brahmapootra ...	.....	14,28,752	14,28,752
Goalparah ...	Ditto ...	.....	10,78,000	10,78,000
Santipore ...	Hooghly ...	8,34,253	.....	8,34,253
Burrisal ...	Burrisal ...	.....	7,94,133	7,94,133
Panchkoota ...	High Level Canal in Midnapore	4,79,050	.....	4,79,050
Gowhatty ...	Brahmapootra ...	.....	3,25,862	3,25,862
Cachar ...	Barak ...	.....	3,10,618	3,10,618
Ghattal ...	Roopnarain ...	3,08,563	.....	3,08,563
Midnapore ...	High Level Canal ...	2,27,520	.....	2,27,520
Patna ...	Ganges ...	1,08,000	.....	1,08,000
Joynuggur ...	12 miles north-east of Culpoe..	89,088	.....	89,088
Boalmaree ...	Barasae, a branch of the Mo-dhumuttee.	84,300	.....	84,300
Serajgunge ...	Jamooa ...	.....	78,141	78,141
Bhanga ...	Koomar ...	64,260	.....	64,260
Goalundo ...	At the junction of the Ganges and Jamooa.	.....	49,568	49,568

Principal marts on road routes.

The chief importing marts on road routes are—

Name of mart.	In what district.	Value. Rs.
Busseerhat ...	24-Pergunnahs ...	2,76,728
Raja's Hat ...	Ditto ...	2,44,275
Kamardanga ...	Ditto ...	1,14,450
Baraset ...	Ditto ...	1,03,907
Behala ...	Ditto ...	98,750
Surserhat ...	Ditto ...	80,507
Sokerbazar ...	Ditto ...	78,140
Goburdanga ...	Ditto ...	52,186
Ranaghat ...	Nuddea ...	37,511
Rajbulhat ...	Hooghly ...	35,220
Khanacool ...	Ditto ...	30,090
Bankra ...	Ditto ...	28,488

The total value of cotton piece-goods imported into Calcutta by sea amounted to Rs. 11,35,01,500, as against Rs. 9,67,63,105 in the preceding year. Almost the whole of the supplies were sent by Great Britain, as will be seen from the places of shipment given below:—

Rs.			
From foreign ports—			
United Kingdom ...	...	...	11,27,62,990
Other ports ...	...	...	4,07,231
Total ...	...	...	11,31,90,221
From Indian ports—			
Bombay ...	...	...	2,59,560
British Burraah ...	...	...	33,087
Other Indian ports ...	...	...	3,201
Madras ...	...	...	12,491
Other ports in Madras ...	...	...	2,940
Total ...	...	...	3,11,279
Grand Total ...	...	...	11,35,01,500

These figures represent the tariff declaration value of the goods.

European twist and yarn.—The total quantity of cotton twist and yarn exported from Calcutta during 1877-78, as compared with the previous year, is here given according to the several routes followed by the trade:—

		1876-77.	1877-78.
		Mds.	Mds.
By rail ...	...	97,900	1,49,000
„ boat ...	...	55,000	48,800
„ road ...	...	4,800	13,800
„ steamer ...	...	2,900	4,500
Total ...	...	1,60,600	2,17,100
By sea ...	...	42,675	49,427
Grand Total ...	...	2,03,275	2,66,527

As in the case of piece-goods, so in twist, the registration of the railway traffic is not complete. The quantities exported by that route

represent goods of both European and Indian manufacture. It is, however, hoped that the necessary steps will be shortly taken to remedy this defect. The distribution of the traffic, province by province, was as follows:—

				1877-78.
				Mds.
Into Bengal	...	...	...	1,32,700
„ North-Western Provinces and Oudh	...	...	...	26,900
„ Punjab	...	...	...	24,100
„ Behar	...	...	...	19,100
„ Bombay	...	...	...	5,700
„ Assam	...	...	...	3,900
„ Central Provinces	...	...	...	2,200
„ Chota Nagpore	...	...	...	2,000
„ Rajpootana States	...	...	...	400
„ Orissa	...	...	...	100
Total				2,17,100

The rail-borne exports evinced a considerable improvement during the past year. The quantity carried by the East Indian Railway alone amounted to 1,01,454 maunds, as against 63,625 maunds in the previous year. The increase is also observable on the Eastern Bengal line, which carried 47,496 maunds in 1877-78, as against 34,235 maunds in 1876-77. In the river-borne traffic there was a slight falling off.

The sea exports were made to the following ports:—

		lb	Mds.
To, Orissa ports	...	1,547,619	19,345
„ British Burmah	...	1,525,794	19,072
„ Madras	...	691,292	8,641
„ Chittagong	...	106,690	1,334
„ other Indian ports	...	3,600	45
„ foreign ports	...	79,182	990
Total		3,954,177	49,427

The districts of Midnapore and Nuddea imported more twist and yarn than any other districts in Bengal. In the case of the former the trade was conducted entirely by country boats, and in that of the latter by rail. The quantity sent to Ghattal alone amounted to 22,000 maunds. The Tantees or Hindoo weavers are very numerous in the country round Ghattal, and still adhere to their trade. In return for twist Calcutta derived a large supply of country-made piece-goods from the Midnapore district.

The total quantity of European twist imported into Calcutta, during 1877-78 amounted to 15,233,851lb, or 1,90,423 maunds, as shown below:—

			lb	Mds.
From foreign ports—				
United Kingdom ...	...	...	14,955,879	1,86,948
Other foreign ports	...	...	251,258	3,141
Total of foreign trade ...			15,207,137	1,90,089
From Indian ports—				
Madras ...	...	...	8,700	108
Bombay ...	...	...	7,500	94
Other Indian ports	...	...	10,514	132
Total of interportal trade ...			26,714	334
Grand Total ...			15,233,851	1,90,423

Owing to incomplete registration of rail-borne traffic, it is impossible to determine even approximately the quantity of European twist which remained in the Calcutta market during the past year. According to the figures for that year, as shown above, the excess of exports over imports amounted to 76,104 maunds, and there can, therefore, be no doubt that a considerable quantity of Indian twist manufactured in the five cotton mills in the vicinity of Calcutta named in the margin must have been included in the export figures of the railway traffic.

Salt.—The consumption of salt in Bengal is mostly met from importation by sea, except in Orissa and in parts of the 24-Pergunnahs, where salt is manufactured under excise rules. The customs duty on imported salt was reduced from Rs. 3-4 to Rs. 3-2 per maund in January last, and has been further reduced to Rs. 2-14 since 1st August 1878.

The following statement shows the total salt trade of Calcutta during the past three years 1875-76 to 1877-78:—

YEAR.	IMPORTS INTO CALCUTTA BY SEA.			EXPORTS FROM CALCUTTA AND HOOGHLY.								Grand Total of exports.
	From foreign ports.	From Indian ports.	Total.	Inland exports.						Exports by sea.		
				By East Indian Railway.	By Eastern Bengal Railway.	By steamer.	By boat.	By road.	Total.			
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	
1875-76	.....	.....	95,36,664	17,37,935	1,16,171	.....	56,48,601	.....	75,02,707	.....	75,02,707
1876-77	69,00,000	7,57,400	76,57,400	19,42,100	1,42,000	1,08,100	48,38,900	39,400	73,71,400	16,000	73,87,400	
1877-78	73,84,448	6,66,320	80,50,768	21,37,519	5,61,631	71,811	57,91,134	47,725	86,09,840	15,578	86,25,418	

The exports by rail were even larger in 1877-78 than during the previous year. The quantities carried by rail are now annually increasing at the expense of the river traffic, and the results are worthy of attention. The figures given in the margin show the gradual development of the trade on the Eastern Bengal line since the past five years.

Exports by internal routes.
The amount of salt carried by the Eastern Bengal Railway since 1873-74 was as follows:—

	Mds.
1873-74	35,000
1874-75	82,782
1875-76	1,16,171
1876-77	4,42,600
1877-78	5,51,631

The distribution of the Calcutta supply is classified by provinces as follows:—

			Exports from Calcutta, 1877-78.
			Mds.
To Bengal district (excluding Calcutta, the Suburbs, and Hooghly)	...	...	49,30,997
To Behar districts	...	...	29,29,879
„ Chota Nagpore districts	...	...	69,986
„ Assam districts	...	...	2,91,482
„ North-Western Provinces and Oudh districts	...	...	3,84,452
„ Nepal	...	...	3,044
Total			86,09,840
To sea-ports	...	...	15,578
Grand Total			86,25,418

The figures showing the consumption per head by districts, divisions, or even provinces, are obviously only roughly approximate at best, and in many cases in no degree represent the actual consumption. The following comparative statement shows the rates of consumption per head of the population per annum, province by province, during the past two years 1876-77 and 1877-78. The rates for 1876-77 are calculated upon the net imports, that is to say, after deducting re-exports; but for 1877-78 the calculations are based upon the gross imports from Calcutta direct:—

NAME OF PROVINCE.		AS OBTAINED BY INTERNAL REGISTRATION IN 1876-77.			AS OBTAINED BY THE REGISTRA- TION OF THE CALCUTTA TRADE IN 1877-78.		
		Net imports.	Population.	Consump- tion per head.	Gross imports.	Population.	Consump- tion per head.
Bengal	Western districts	Mds.	No.	lb oz.	Mds.	No.	lb oz.
	Central ditto	8,49,000	5,798,401	11 11	8,50,500	5,862,617	11 12
	Eastern ditto	20,82,400	15,690,439	10 10	26,27,700	15,014,073	14 0
	Total	16,26,200	11,073,063	11 12	14,52,800	11,120,695	10 7
Total		45,57,600	32,561,968	11 3	49,31,000	31,946,255	12 5
Behar	...	19,30,500	19,736,101	7 13	29,29,900	20,412,527	12 7
Orissa	...	4,76,700	4,317,999	8 13	.....	4,317,999	0 0
Chota Nagpore	...	62,200	3,825,571	1 5	70,000	3,821,355	1 7
Total of the provinces under the Lieutenant- Governor of Bengal		70,27,000	60,441,639	9 4½	79,30,900	60,498,136	10 8
Assam	...	4,36,600	3,841,263	8 0	2,91,500	3,921,263	5 15

The stations to which salt was largely consigned by railway are given in the following statement:—

Along East Indian Railway.

Name of station.	In what district.	Quantity. Mds.
Patna ...	Patna ...	7,76,598
Raneegunge ...	Burdwan ...	2,84,593
Arrah ...	Shahabad ...	1,13,218
Bhagulpore ...	Bhagulpore ...	69,573
Barrh ...	Patna ...	58,300
Burdwan ...	Burdwan ...	56,908
Cynthea ...	Beerbhoom ...	52,870
Buxar ...	Shahabad ...	52,158
Giridi ...	Hazaribagh ...	45,525
Zamaneah ...	Benares ...	39,130
Bihta ...	Patna ...	39,079
Bhulpore ...	Beerbhoom ...	32,986
Ahmoodpore ...	Ditto ...	31,283

Along Eastern Bengal Railway.

Name of station.	In what district.	Quantity. Mds.
Serajgunge ...	Pubna ...	3,02,948
Goalundo ...	Furcedpore ...	99,176
Naraingunge ...	Dacca ...	38,960
Kooshtea ...	Nuddea ...	23,114

The quantity despatched by country boats was principally distributed to the following marts:—

Name of mart.	On what river.	Quantity. Mds.
Serajgunge ...	Jamooana ...	3,50,492
Naraingunge ...	Luckhya ...	2,79,096
Doolalgunge ...	Mohananda ...	2,29,877
Khagurriah ...	Boor Gunduk ...	1,44,085
Balagunge ...	Burbha (in Sylhet) ...	1,42,523
Jeagunge ...	Bhagiruthee ...	1,33,803
Goalundo ...	At the junction of the Ganges and Jamooana ...	1,20,036
Revelgunge ...	Gogra ...	1,19,756
Maldah ...	Mohananda ...	1,13,078
Roshra ...	Four miles below the junction of the Boor Gunduk and Bagmuttee ...	1,12,000
Ghattal ...	Roopnarain ...	1,11,911
Nattore ...	Narud, a branch of the Burral ...	1,09,908
Moorligunge ...	Koosee ...	86,390

* The Railway Companies run river steamers between Goalundo and Serajgunge and Naraingun.

Name of mart.		On what river.		Quantity.
				Mds.
Nulehitty	...	Nulehitty	...	84,889
Patna	...	Ganges	...	73,387
Gobindpore	...	Narud	...	71,437
Durbhunga	...	Little Bagmuttee	...	67,148
Cooch Behar	...	On a branch of the Toorsa	...	62,500
Rampore Baulcah	...	Ganges	...	60,712
Gopalpara	...	Bramapootra	...	60,684
Kolakopa	...	Hilsamari, a branch of the Ganges (in Dacca)	...	57,073
Burhej	...	Gogra	...	55,742
Gola Gopalpore	...	Gogra	...	54,287
Madaripore	...	Koomar	...	50,737
Santipore	...	Hooghly	...	46,595
Bhojrub Bazar	...	Megna	...	43,276
Balia Sahebgunge	...	Koosee	...	40,702
Monghyr	...	Ganges	...	38,694
Midnapore	...	High Level Canal	...	38,659
Dacca	...	Boorigunga	...	38,255
Jhalokati	...	Gujalia	...	37,574
Dhoolian	...	Ganges	...	37,131
Cutwa	...	Bhagiruttee	...	36,990
Raneegunge	...	Koosee	...	34,715
Somastipore	...	Boor Gunduk	...	34,059

The river steamers carried over 71,000 maunds; of this quantity 30,200 maunds were sent to Seebesaugor, 11,600 maunds to Nowgong, 11,000 maunds to Debrooghur, 7,000 maunds to Naraingunge, 6,000 maunds to Bhojrub Bazar, and 5,200 maunds to Durrung.

The amount of salt imported into Calcutta by sea during the past year was 295,742 tons, or 80,50,768 maunds, as against 281,292 tons, or 76,57,400 maunds, in the preceding year. The sea-borne supply of salt was for the most part derived from Liverpool, as shown below:—

Places of shipment.	IMPORTS INTO CALCUTTA BY SEA.			
	In 1876-77.		In 1877-78.	
	Tons.	Mds.	Tons.	Mds.
Liverpool	225,744	61,45,253	234,019	63,70,528
Bombay	13,389	3,64,478	18,384	5,00,455
Arabia	11,679	4,35,038	16,068	4,37,407
Italy	10,520	2,86,378	10,528	2,86,596
Madras	7,206	1,96,163	6,093	1,65,965
France	4,590	1,24,950	3,697	1,00,641
Egypt	2,057	55,995	3,703	1,00,804
Other countries	1,805	49,145	3,250	88,472
Total	276,990	76,57,400	295,742	80,50,768

The quantity manufactured under excise license in the 24-Pergunnahs during the year was 18,023 maunds. The total supply of taxed salt was therefore 80,68,791 maunds, of which 6,78,978 maunds were consigned to the North-Western Provinces, Assam, and Nepal, and 73,89,813 maunds were left for Bengal.

The total import of taxed salt into Calcutta being 80,68,791 maunds, and the stocks which remained at the close of 1876-77 being a little over 37,00,000 maunds, the aggregate quantity available to the trade amounted to 1,17,68,791 maunds. The gross quantity exported by all routes amounted to 86,25,418 maunds, leaving a surplus of 31,43,373 maunds for local consumption and stock in trade in Calcutta and Hooghly. According to the returns of the Board of Revenue the stocks of salt remaining in hand in Calcutta at the close of the year 1877-78 amounted to a little over 23½ lakhs, namely—

	Mds.
In Government golahs	16,63,124
„ private	2,14,415
Afloat (i.e.) on shipboard	4,58,863
Total	23,36,402

The quantity that remained for consumption in Calcutta and Hooghly, and in a part of the 24-Pergunnahs district, was therefore a little over 8 lakhs, as against 7 lakhs of maunds in the preceding year.

The total value of the import and export trade of Behar (exclusive of the local traffic moving from one district to another within the Behar province) during the year 1877-78 was as follows:—

Specification of routes.	Imports into Behar, 1877-78.	Exports from Behar, 1877-78.
	Rs.	Rs.
By country boats	2,47,50,320	3,69,81,350
„ rail	4,05,80,945	4,62,02,576
„ road	89,13,089	18,01,232
Total	7,42,44,354	8,49,85,158

The following statement shows in a compendious form the trade of Behar in all the principal staples of traffic during 1877-78, as well as the sources of their supply and their destination:—

LIST OF PRINCIPAL STAPLES.	IMPORTS INTO BEHAR.				EXPORTS FROM BEHAR.					
	From Assam.	From Bengal.	From North-Western Provinces and Oudh.	From Nepal.	Total.	To Bengal.	To North-Western Provinces and Oudh.	To Assam.	To Nepal.	Total.
FOOD-GRAINS.										
Rice	8,570	Mds.	4,55,733	Mds.	17,457	4,31,057	8,93,137	5,41,936	Mds.	7,27,573
Paddy	2,13,774	.....	15,025	5,33,356	7,62,169	81,406	.....	17,922
Wheat	605	.....	9,66,121	30,702	4,37,428	21,48,523	349	2,411
Pulses and gram	7,851	.....	1,35,328	89,139	3,02,358	2,34,260	1,968	12,805
Miscellaneous spring and rain crops	10,843	.....	1,67,932	2,55,464	4,63,374	2,37,859	.....	2,251
Total	8,570	.....	7,33,910	.....	7,30,983	13,69,723	28,43,396	49,80,514	2,337	43,423
FIBROUS PRODUCTS.										
Jute	4,901	.....	2,582	7,643	2,43,557	.....	.....	7
Gunny-bags	6,399,920	.....	109,162	6,489,952	1,236,296	853,376	.....	8,756
Gunny-cloth	10,500	.....	.....	10,500	5,500	.....	.....	.....
OILSEEDS.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Linseed	3,292	.....	11,67,710	2,40,567	38,75,541	1,143	.....	29,634
Mustard seed	6,33,340	97,110	21,52,586	3,131	.....	6,419
OTHER PRODUCTS.										
Cotton, raw	75	.....	34,228	2,664	36,970	1,291	.....	4,675
Indigo	1,684	.....	1,14,476	.....	.....	14
Saltpetre	2,673	10,538	4,96,387	1,499	.....	7,313
Tea	85,829	.....	.....	.....
EUROPEAN GOODS.										
Cotton piece-goods (European)	3,17,64,250	.....	67,071	12,922	3,13,34,143	.....	.....	8,03,869
Cotton twist and yarn (European)	19,051	.....	8	.....	14	.....	.....	10
Salt	30,87,412	.....	175	.....	50,97,799	.....	.....	71,394
	24
	3,21,478

A short account of the trade in respect to food-grains, cotton piece-goods, and salt, is given below. Unfortunately, the figures for the last quarter of the year are deficient both as regards the Ganges-borne trade of Behar with the Upper Provinces and the trade carried by rail from and to Behar; but measures are being adopted to make the registration as complete as possible.

Rice.—The following statement illustrates the rice trade of the Behar province during the past two years 1876-77 and 1877-78 :—

	Imports.		Exports.	
	1876-77. Mds.	1877-78. Mds.	1876-77. Mds.	1877-78. Mds.
By boat ...	8,65,800	4,61,700	1,67,000	10,16,292
„ rail ...	Not registered.		5,48,900	1,56,448
„ road ...	2,60,800	4,31,437	15,500	1,14,696
Total ...	11,26,600	8,93,137	7,31,400	12,87,436

In imports there was a decrease of about 2½ lakhs, and in exports there was an increase of over 5½ lakhs, which is for the most part attributable to the transfer of the Maldah district from Bengal to Bihar.

As regards the river-borne trade, the districts supplying the largest quantities of rice to Behar were Dinagepore, Moorshedabad, and Rajshahye; while among the importing districts Sarun and Patna did the largest trade. The following statement shows the details of the import of rice, district by district, during the past two years :—

Names of importing districts.		Quantity.	
		1876-77. Mds.	1877-78. Mds.
Sarun ...	...	3,46,900	2,60,520
Patna ...	...	3,29,100	1,39,716
Shahabad ...	...	25,400	27,651
Durbhunga ...	...	44,200	16,685
Mozufferpore ...	...	16,400	7,936
Sonthal Pergunnahs ...	...	85,600	6,638
Monghyr ...	...	8,300	1,448
Bhagulpore ...	...	5,100	514
Purneah ...	...	4,800	500
Maldah ...	...	(within Bengal)	89
Total ...	...	8,65,800	4,61,700

Names of supplying districts.		Quantity.	
		1876-77. Mds.	1877-78. Mds.
Dinagepore ...	...	1,28,000	1,75,150
Moorshedabad ...	...	1,31,600	1,38,936
Rajshahye ...	...	83,200	60,305
Dacca ...	...	39,500	34,292
Mymensingh ...	...	.....	21,210
Goruckpore ...	...	1,34,200	9,756
Sylhet ...	...	.....	8,870
Bogra ...	...	9,100	5,200
Tipperah ...	...	15,300	4,033
Furzedpore ...	...	.....	3,242
Ghazipore ...	...	10,500	2,530
Busti ...	...	54,500	2,503
Azingurh ...	...	14,200	2,288
Pubna ...	...	12,500	2,260
Other districts ...	...	2,33,200	1,145
Total ...	...	8,65,800	4,61,700

Imports by road.

The imports from Nepal by road were destined for the districts named below :—

Names of importing districts.	In 1876-77. Mds.	In 1877-78. Mds.	Names of importing districts.	In 1876-77. Mds.	In 1877-78. Mds.
Mozufferpore ...	1,45,600	1,56,562	Bhagulpore ...	7,700	12,418
Sarun ...	47,700	91,607	Monghyr ...	7,000	12,303
Chumparun ...	19,000	82,324	Patna ...	100	116
Purneah ...	19,200	65,255			
Durbhunga ...	14,500	10,472	Total ...	2,60,800	4,31,657

At Buxar 380 maunds of rice only were registered as coming into that station from Ghazipore.

The river-borne exports from Behar amounted during the past year to 10,16,292 maunds, as against

Exports by country boats. 1,67,000 maunds in the preceding year. A

great portion of the increase during the past year was due to the transfer of the Maldah district from the province of Bengal to that of Behar. The following statements show the exporting districts and the places of destination :—

Names of exporting districts.

		Quantity.	
		1876-77. Mds.	1877-78. Mds.
Maldah	(within Bengal)		6,34,195
Bhagulpore ...	...	61,800	1,03,444
Purneah ...	...	22,500	77,492
Sonthal Pergunnahs...	...	3,300	58,897
Patna ...	...	35,400	58,608
Monghyr ...	...	29,600	43,415
Sarun ...	...	2,800	20,507
Durbhunga ...	...	2,900	8,840
Gya ...	...	6,900	8,795
Mozufferpore ...	...	.....	2,099
Other districts ...	...	1,800	.....
Total ...		1,67,000	10,16,292

Places of destination.

		Quantity.	
		1876-77. Mds.	1877-78. Mds.
Calcutta ...	...	1,08,000	3,28,803
Ghazipore ...	...	21,800	2,31,007
Goruckpore ...	...	8,300	1,37,453
Benares ...	...	2,500	1,34,192
Azimghurh ...	...	4,900	72,112
Hooghly ...	...	17,000	32,793
Mirzapore ...	...	.....	31,606
Fyzabad ...	...	.....	21,603
Nuddea ...	...	.....	10,361
Moorshedabad ...	...	2,700	10,013
Bustee ...	...	.....	1,305
Dacca ...	...	.....	1,200
Other districts ...	...	1,800	3,944
Total ...		1,67,000	10,16,292

Exports by road.

The exports by road into Nepal were from the following Behar districts :—

			1876-77.	1877-78.
			Mds.	Mds.
Purneah	...	...	2,900	11,100
Mozufferpore	...	...	3,800	4,092
Chumparun	...	...	500	978
Bhagulpore	...	...	8,000	960
Sarun	...	...	.....	583
Durbhunga	...	...	200	209
Other districts	...	...	100	.....
Total			15,500	17,922

The exports from Behar into Ghazipore by road *via* Buxar amounted to 96,774 maunds during the past year.

Paddy.—The total quantities of paddy imported into, and exported from, Behar during the past two years are shown below, according to the several routes followed by the trade :—

Specification of routes.		Import.		Export.	
		1876-77.	1877-78.	1876-77.	1877-78.
By boat	...	3,21,200	2,28,773	2,000	84,612
„ rail	...	.....	.....	.....	211
„ road	...	3,22,800	5,33,336	10,100	9,839
Total		6,44,000	7,62,109	12,100	94,662

The imports of paddy by country boats showed a decrease in the past year, as compared with the trade of the previous year. The importing districts of Behar, and the exporting districts which sent paddy into Behar, were as follow :—

Names of importing districts.		Quantity.	
		1876-77.	1877-78.
		Mds.	Mds.
Patna	...	1,75,700	1,69,451
Sarun	...	99,100	32,662
Durbhunga	...	11,500	13,533
Mozufferpore	...	13,100	4,763
Shahabad	...	3,900	4,021
Maldah	...	.....	1,834
Monghyr	...	3,100	1,700
Sonthal Pergunnahs	...	3,700	488
Bhagulpore	...	4,000	321
Other districts	...	7,200	.....
Total		3,21,300	2,28,773

Sources of supply.	Quantity.	
	1876-77.	1877-78.
	Mds.	Mds.
Dinagepore	55,200	1,69,732
Rajshahye	4,300	13,243
Dacca	3,500	13,020
Moorshedabad	4,800	12,897
Fyzabad	18,600	7,476
Mymensingh ... ..	.....	3,025
Goruckpore	57,000	2,609
Baraich	43,300	2,365
Other districts	1,34,600	4,406
Total	3,21,300	2,28,773

Imports by road.

The road imports were all from Nepal, and were consigned to the following places :—

Names of importing districts.	Quantity.	
	1876-77.	1877-78.
	Mds.	Mds.
Chumparun	1,04,892	2,02,705
Purneah	62,233	1,15,268
Mozufferpore	50,696	87,462
Sarun	7,396	56,195
Durbhunga	69,059	51,795
Bhagulpore	29,510	19,559
Monghyr	50	352
Total	3,23,836	5,33,336

The incorporation of the Maldah district with the Behar province during the past year raised the export trade of Behar by country boats from 2,000 maunds in 1876-77 to over 84,000 maunds in 1877-78. The following statement shows all the exporting districts of Behar and the places of destination :—

Names of exporting districts in Behar.	Quantity.	Places of destination.	Quantity.
	Mds.		Mds.
Maldah	51,731	Goruckpore	50,164
Patna	10,379	Azingurh	12,590
Monghyr	5,450	Fyzabad	8,753
Sarun	4,929	Ghazipore	5,622
Bhagulpore	4,918	Moorshedabad	2,641
Sonthal Pergunahs	3,541	Nuddea	1,207
Purneah	2,532	Mirzapore	1,099
Durbhunga	1,112	Burdwan	730
Mozufferpore	20	Allahabad	474
Total	84,612	Other districts	1,332
		Total	84,612

Exports by road.

The quantity exported by road into Nepal was sent from the following Behar districts :—

Names of exporting districts.	Quantity.	Names of exporting districts.	Quantity.
	Mds.		Mds.
Mozufferpore ...	3,591	Durbhunga ...	230
Chumparun ...	2,910	Purneah ...	174
Bhagulpore ...	795		
Sarun ...	334	Total ...	8,034

At Buxar 1,805 maunds of paddy were registered as going over to Ghazipore.

Wheat.—The wheat trade of Behar during the year 1877-78 is illustrated in the following statement :—

	Imports.	Exports.
	Mds.	Mds.
By boat ...	3,86,765	14,54,111
„ rail ...	Not registered.	7,16,337
„ road ...	40,663	5,380
Total ...	4,27,428	21,75,828

The imports by country boats were obtained entirely from the North-Western Provinces, and were in a great measure destined to two marts, namely, Patna City 1,75,226 maunds, and Simuria, on the Gogra in Sarun, 1,98,580 maunds.

The following table shows all the importing districts of Behar, as well as the places of supply ;—

Names of importing districts.	Quantity.	Names of supplying districts.	Quantity.
	Mds.		Mds.
Sarun ...	2,00,246	Gonda ...	1,08,103
Patna ...	1,84,628	Goruckpore ...	81,959
Purneah ...	722	Fyzabad ...	79,846
Monghyr ...	600	Baraich ...	75,336
Bhagulpore ...	550	Azimgurh ...	22,501
Durbhunga ...	19	Eustee ...	13,147
Total ...	3,86,765	Seetapore ...	2,900
		Ghazipore ...	1,670
		Other districts ...	1,303
		Total ...	3,86,765

Imports by road.

The road imports were obtained from Nepal, and were destined for the following districts in Behar :—

Names of importing districts.	Quantity.	Names of importing districts.	Quantity.
	Mds.		Mds.
Mozufferpore ...	17,551	Durbhunga ...	1,889
Purneah ...	4,119	Sarun ...	1,501
Bhagulpore ...	2,967	Shahabad ...	24
Chumparun ...	2,651	Total ...	30,702

The imports by road from Ghazipore registered at Buxar amounted to 9,961 maunds during the past year.

Of the boat exports, nearly 13 lakhs of maunds were destined for the Calcutta port. The quantity sent to the North-Western Provinces and Oudh amounted to only 23,677 maunds, and to Assam 423 maunds. Besides Calcutta, the other largest importing marts in Bengal were Bhudressur (81,745 maunds), Kooshtea (26,150 maunds), and Dacca (21,254 maunds). The following statement shows the exporting districts of Behar and the places of destination outside that province:—

Names of exporting districts in Behar.	Quantity.	Places of destination.	Quantity.
	Mds.		Mds.
Bhagulpore ...	5,62,631	Calcutta ...	12,85,064
Monghyr ...	2,81,906	Hooghly ...	81,745
Patna ...	2,16,209	Nuddea ...	26,150
Sarun ...	1,28,653	Dacca ...	21,254
Maldah ...	1,03,519	Rajshahye ...	11,333
Purneah ...	63,695	Goruckpore ...	10,203
Shahabad ...	57,251	Fyzabad ...	6,780
Sonthal Per-		Azimghur ...	3,829
gunnahs ...	37,749	Moorshedabad ...	3,293
Durbhunga ...	1,408	Benares ...	1,411
Other districts	1,090	Ghazipore ...	740
		Other districts	2,309
Total ...	14,54,111	Total ...	14,54,111

The rail exports during the year amounted to 7,16,337 maunds, all destined for Calcutta. The entire supply was derived from the following districts of Behar:—

Names of supplying districts.	Quantity.	Names of supplying districts.	Quantity.
	Mds.		Mds.
Patna	3,09,768	Purneah	2,100
Monghyr	1,32,581	Other districts	717
Shahabad	1,07,225		
Bhagulpore	94,343	Total	7,16,337
Sonthal Pergun-			
nahs	69,603		

Pulses and Gram.—The trade of Behar in pulses and gram during the past year was as follows:—

	Imports.	Exports.
	Mds.	Mds.
By boat ...	1,97,134	13,92,555
" rail ...	Not registered.	8,97,087
road ...	1,05,204	16,349
Total	3,02,338	23,05,991

Of the imports by boat, amounting to 1,97,134 maunds, Goruckpore supplied 85,187 maunds and Moorshedabad 72,438 maunds. The following statement

Imports by country boats.

shows the principal importing districts of Behar, and the sources from which the supply was obtained during the past year :—

Names of importing districts.	Quantity. Mds.	Names of supplying districts.	Quantity. Mds.
Patna	1,22,058	Goruckpore	85,817
Sarun	39,742	Moorshedabad	72,438
Mozufferpore	12,501	Azimungunge	10,160
Durbhunga	12,187	Gonda	5,490
Sonthal Pergunnahs	4,177	Ghazipore	4,986
Bhagulpore	2,961	Fyzabad	4,425
Monghyr	1,464	Bustee	4,081
Maldah	1,242	Baraich	3,750
Purneah	772	Pubna	1,568
Shahabad	27	Other places	4,419
Total	1,97,134	Total	1,97,134

Nearly two-thirds of the total supply were imported into Patna City for re-exportation by rail to Calcutta.

Imports by road.

The imports by road were received from Nepal, and were destined as follow :—

Names of importing districts.	Quantity. Mds.	Names of importing districts.	Quantity. Mds.
Mozufferpore	55,753	Bhagulpore	1,361
Chumparun	15,019	Shahabad	25
Purneah	11,555	Total	89,159
Durbhunga	2,992		
Sarun	2,454		

The registration at Buzar showed 16,045 maunds of pulses imported into that station from Ghazipore.

The exports by country boats were largest from Monghyr, Patna, Bhagulpore, and Maldah. The exports were chiefly sent to Calcutta (9,65,231 maunds), Goruckpore (1,33,128 maunds), Hooghly (75,030 maunds), Azimghur (63,359 maunds), and to Dacca (59,970 maunds). The following statement shows the exporting districts of Behar and the places of destination :—

Names of exporting districts.	Quantity. Mds.	Places of destination.	Quantity. Mds.
Patna	4,42,124	Calcutta	9,67,231
Monghyr	4,08,068	Goruckpore	1,33,128
Bhagulpore	1,65,632	Hooghly	74,830
Maldah	1,43,013	Azimghur	63,359
Gya	55,997	Dacca	59,970
Sarun	56,997	Fyzabad	30,792
Shahabad	43,086	Ghazipore	14,679
Purneah	37,415	Burdwan	14,818
Sonthal Pergunnahs	16,902	Moorshedabad	9,597
Durbhunga	11,424	Benares	4,986
Mozufferpore	6,932	Nuddea	4,435
Other districts	1,965	Rajshahye	3,772
Total	13,92,555	Other places	10,958
		Total	13,92,555

The rail exports, amounting to 8,98,887 maunds, were all sent to Calcutta, and were consigned from the following districts :—

			Mds.				Mds.
Patna	...	...	5,38,501	Bhagulpore	...	...	17,861
Monghyr	...	...	2,20,284				
Shahabad	...	...	1,00,279	Total	...	...	8,97,087
Sonthal Pergunnahs	...		20,162				

principal importing districts of Behar and the sources of supply from outside that province :—

Names of importing districts.	Miscellaneous spring crops.	Miscellaneous rain crops.	Total.
	Mds.	Mds.	Mds.
Sarun ...	1,32,658	24,841	1,57,499
Patna ...	9,396	1,550	10,946
Mozufferpore ...	6,723	150	6,873
Shahabad ...	257	130	387
Durbhunga ...	914	.....	914
Sonthal Pergunnahs	240	.....	240
Bhagulpore ...	195	.....	195
Monghyr ...	130	.....	130
Other districts ...	8	200	208
Total	1,50,521	26,871	1,77,392

Sources of supply.	Miscellaneous spring crops.	Miscellaneous rain crops.	Total.
	Mds.	Mds.	Mds.
Goruckpore .	1,15,209	15,771	1,30,980
Azimghur .	8,201	4,276	12,477
Moorsheadabad .	8,841	.....	8,841
Baraich .	5,194	2,561	7,755
Gonda .	4,700	1,765	6,465
Bustee .	3,800	1,498	5,298
Dacca .	1,240	.....	1,240
Mirzapore .	415	.....	415
Ghazipore .	516	1,000	1,516
Other places .	2,405	.....	2,405
Total	1,50,521	26,871	1,77,392

The registered imports of miscellaneous rain crops by road routes all came from Nepal, excepting a total of 513 maunds imported from the North-Western

Imports by road.

Provinces—

Names of districts in Behar.	Miscellaneous spring crops.	Miscellaneous rain crops.	Total.
	Mds.	Mds.	Mds.
Mozufferpore ...	19,756	1,17,456	1,37,212
Chumparun ...	15,542	68,413	83,955
Sarun ...	760	37,565	38,325
Durbhunga ...	3,167	13,530	16,697
Bhagulpore ...	200	5,061	5,261
Purneah ...	3,183	776	3,959
Shahabad ...	383	130	513
Patna ...	.....	60	60
Total ...	42,991	2,42,991	2,85,982

The exports by boat were largest from the districts of Patna, Sarun, Bhagulpore, and Shahabad. Goruckpore, Calcutta, Azimghur, and Fyzabad, received the largest quantities. The Calcutta imports were almost entirely in miscellaneous spring crops, while the North-Western Provinces took a

Exports by boat.

great deal of the rain crops. The following statement shows the exporting districts of Behar and the places of destination:—

Names of exporting districts.	Miscellaneous spring crops.	Miscellaneous rain crops.	Total.
	Mds.	Mds.	Mds.
Patna ...	71,949	2,47,887	3,19,836
Sarun ...	66,048	62,266	1,28,314
Bhagulpore ...	56,670	53,291	1,09,961
Shahabad ...	63,016	5,936	68,952
Monghyr ...	6,472	41,281	47,753
Durbhunga ...	1,793	33,286	35,079
Maldah ...	15,173	3,725	18,898
Gya ...	1,870	16,861	18,721
Mozufferpore ...	4,567	3,805	8,372
Purneah ...	1,961	1,200	3,161
Sonthal Pergunnahs ...	2,277	721	2,998
Chumparun ...	401	.....	401
Total ...	2,92,197	4,70,249	7,62,446

Places of destination.	Miscellaneous spring crops.	Miscellaneous rain crops.	Total.
	Mds.	Mds.	Mds.
Goruckpore ...	44,610	2,94,676	3,39,286
Calcutta ...	1,49,667	4,221	1,53,888
Azimghur ...	25,986	1,12,346	1,38,332
Fyzabad ...	56,275	30,848	87,123
Ghazipore ...	3,615	21,318	24,933
Bustee ...	3,199	3,323	6,522
Moorshedabad ...	3,658	.....	3,658
Jaunpore ...	663	1,858	2,521
Gonda ...	1,320	568	1,888
Hooghly ...	1,568	.....	1,568
Burdwan ...	1,200	.....	1,200
Other places ...	436	1,091	1,527
Total ...	2,92,197	4,70,249	7,62,446

The rail exports in these grains are shown under "Other food-grains." The quantity of such grains sent to Calcutta during the past year was as follows:—

Exporting districts of Behar.	Imports into Calcutta. Other food-grains.	
	Mds.	
Patna	49,377
Sonthal Pergunnahs	12,154
Bhagulpore	10,860
Shahabad	7,265
Monghyr	4,217
Mozufferpore	3,866
Total	87,739

The exports from Behar into Nepal were insignificant, as will be seen from the statement given below:—

Names of supplying districts in Behar.	Miscellaneous		Total.
	spring crops.	rain crops.	
	Mds.	Mds.	Mds.
Mozufferpore	21	856	877
Purneah	525	.....	525
Bhagulpore	25	467	492
Chumparun	17	133	150
Durbhunga	2	139	141
Sarun	66	.....	66
Total	656	1,595	2,251

The registration at Buxar showed 15,593 maunds of spring crops and 11,240 maunds of rain crops consigned to Ghazipore.

Cotton-Piece Goods, European.—The trade of Behar in cotton piece-goods (European) is illustrated in the following statement:—

		Imports.	Exports.
		1877-78.	1877-78.
		Rs.	Rs.
By boat ... ..	...	1,75,309	11,800
„ rail ... ..	...	3,15,88,941	Not registered.
„ road ... ..	...	69,893	9,36,580
Total ... ..	...	3,18,34,143	9,48,380

The river-borne imports were almost entirely derived direct from Calcutta. The table below shows the importing districts of Behar and places of supply:—

Importing districts.		Value.	Whence imported.		Value.
		Rs.			Rs.
Patna	...	1,08,000	Calcutta	...	1,68,259
Purneah	...	35,000	Nuddea	...	7,050
Monghyr	...	17,000			
Maldah	...	13,800			
Other places	...	1,509	Total	...	1,75,309
Total	...	1,75,309			

The imports by rail were all from Calcutta and Howrah, and were consigned to the following Behar districts:—

Names of importing districts.		Value.
		Rs.
Patna ... ..	...	1,47,85,286
Sonthal Pergunnahs ... ..	...	42,46,800
Purneah ... ..	...	35,80,343
Bhagulpore ... ..	...	31,04,505
Shahabad ... ..	...	24,95,838
Monghyr ... ..	...	19,98,619
Durbhunga ... ..	...	9,33,204
Mozufferpore ... ..	...	4,44,396
Total ... ..	...	3,15,83,941

Exports by country boats.

The exporting districts of Behar and the places of destination are given below:—

Names of exporting districts.			Value.	Places of destination.			Value.
			Rs.				Rs.
Patna ...	...	...	9,300	Goruckpore ...	...	...	9,300
Maldah ...	...	...	2,500	Moorshedabad ...	...	...	2,500
Total			11,800	Total			11,800

Exports by road.

The exports by road to Nepal were as follow:—

Exports by roads.			Value.
			Rs.
From Chumparun	...	...	3,84,785
" Purneah	...	...	1,65,378
" Bhagulpore	...	...	91,802
" Mozufferpore	...	...	69,426
" Patna	...	...	47,848
" Sarun	...	...	35,118
" Durbhunga	...	...	9,512
Total			8,03,869

The registration at Buxar showed that goods valued at Rs. 1,32,711 were sent from Buxar to Ghazipore during the past year.

Deducting exports from imports, there remained piece-goods valued at Rs. 3,08,85,763 for consumption within the Behar districts. The population of Behar

Rate of consumption per head of the population.

being 20,412,527 souls, the consumption in the province during the year will be at the rate of Rs. 1-8-2 per head, as against Rs. 1-2-8 in the previous year.

The details of the piece-goods trade, as registered during the past two years, are shown below:—

AS PER INTERNAL REGISTRATION OF 1876-77.				AS PER BEHAR REGISTRATION OF 1877-78.			
DISTRICTS.	Gross imports.	Gross exports.	Net imports.	DISTRICTS.	Gross imports.	Gross exports.	
	Rs.	Rs.	Rs.		Rs.	Rs.	
Patna	1,35,97,900	20,41,400	1,15,56,500	Patna	1,48,94,236	57,748	
Gya	49,200	.....	49,200	Shahabad	25,52,909	1,82,711	
Shahabad	2,72,500	2,01,000	18,71,500	Mozufferpore	4,45,616	69,426	
Mozufferpore	13,65,500	1,52,300	12,13,200	Durbhunga	9,33,204	9,512	
Durbhunga	90,600	17,400	73,200	Sarun ... ..	.....	35,118	
Sarun	55,700	1,14,900	.....	Champuram	11,352	3,84,785	
Champuram	1,23,400	2,69,400	.....	Monghyr	20,15,619	.....
Monghyr	13,39,800	.....	14,39,800	Bhagulpore	31,05,204	91,802	
Bhagulpore	19,19,400	66,000	18,83,400	Purneah	36,15,343	1,65,378	
Purneah	27,66,600	1,51,500	26,15,700	Maldah	13,800	2,500	
Sonthal Pergunnahs	27,48,200	1,60,200	25,88,000	Sonthal Pergunnahs	42,44,800	.....
Total	2,62,62,600	32,01,200	2,30,68,400	Total	3,18,34,143	9,48,380	
Calculated results as to rates of consumption.	Net imports as shown above.	Population of Behar (excluding Maldah).	Consumption per head of the population.	Net imports (after deducting re-exports).	Population of Behar (including Maldah).	Consumption per head of the population.	
	Rs.	Souls.	Rs. A. P.				
	2,39,58,400	19,700,000	1 2 8				3,08,85,763	0,412,527	1 8 2

The figures showing the imports and exports for 1876-77 include imports and exports between districts in Behar. These imports and exports are not shown in the figures for 1877-78.

Salt.—The salt trade of Behar during the past year was as follows:—

Specification of routes.	Imports, 1877-78.	Exports, 1877-78.
By boat ...	16,94,489	2,04,129
„ rail ...	13,93,098	Not registered.
„ road ...	212	1,17,349
Total:	30,87,799	3,21,478

The imports by country boats were shipped direct from Calcutta and Hooghly, excepting a total of 1,57,708 maunds, of which 1,32,611 maunds went from Kooshtea. The following statement shows in detail all the importing districts of Behar, as well as the places of supply:—

Names of importing districts.	Quantity, 1877-78. Mds.	Names of supplying districts.	Quantity, 1877-78. Mds.
Purneah ...	3,76,014	Calcutta and Hooghly	15,36,781
Monghyr...	3,74,856	Nuddea ...	1,32,611
Durbhunga ...	2,36,704	Moorshedabad ...	21,805
Bhagulpore ...	2,25,926	Burdwan...	1,057
Maldah ...	1,80,813	Pubna ...	713
Sarun ...	1,57,309	Jessore ...	492
Patna ...	1,10,683	Furreedpore ...	475
Mozufferpore ...	17,139	Dacca ...	380
Shahabad ...	7,435	Goruckpore ...	175
Sonthal Pergunnahs...	7,110		
Chumparun ...	200		
Total ...	16,94,489	Total ..	16,94,489

The imports by rail were likewise all from Calcutta and Howrah, and were destined for the under-mentioned districts:—

	Exports from Calcutta and Howrah, 1877-78. Mds.		Exports from Calcutta and Howrah, 1877-78. Mds.
Into Patna ...	3,02,901	Into Purneah ...	2,781
„ Shahabad ...	2,28,268	„ Mozufferpore ...	508
„ Bhagulpore ...	1,04,103		
„ Sonthal Pergunnahs	78,519	Total ...	13,93,098
„ Monghyr ...	63,189		
„ Durbhunga ...	12,829		

Exports by country boats.

The total registered exports by country boats were 2,04,129 maunds during 1877-78, as shown below:—

Names of exporting districts.	Quantity. Mds.	Places of destination.	Quantity. Mds.
Patna ...	1,51,040	Goruckpore	1,66,876
Sarun ...	52,263	Azimghur ...	17,865
Mozufferpore	601	Ghazipore ...	9,001
Monghyr ...	225	Bustee ...	4,821
		Fyzabad ...	3,229
		Gonda ...	1,160
		Other places	1,177
Total	2,04,129	Total	2,04,129

Exports by road.

The exports by road to Nepal were consigned from the following districts:—

	1877-78. Mds.		1877-78. Mds.
From Mozufferpore	27,958	From Sarun ...	435
„ Purneah	13,807	„ Patna ...	310
„ Chumparun	12,933	„ Shahabad	122
„ Bhagulpore	10,220		
„ Durbhunga	5,609	Total	71,391

The quantity of salt despatched from Buxar to Ghazipore amounted to 45,955 maunds during the past year.

Total salt trade of all Behar districts.

The total trade of all the Behar districts is shown separately, as follows:—

Imports.	1877-78. Mds.*	Exports.	1877-78. Mds.
Patna ...	10,13,584	Patna ...	1,51,350
Monghyr...	4,38,045	Sarun ...	52,698
Purneah ...	3,78,795	Shahabad...	46,077
Bhagulpore	3,30,929	Mozufferpore	28,559
Durbhunga	2,49,533	Purneah ...	13,807
Shahabad	2,35,703	Chumparun	12,933
Maldah ...	1,80,813	Bhagulpore	10,220
Sarun ...	1,57,309	Durbhunga	5,609
Sonthal Pergunnahs	85,629	Monghyr...	225
Mozufferpore	17,947		
Chumparun	412		
Total	30,87,799	Total	3,21,478

* Deducting exports from imports, there remained 27,66,321 maunds of licit salt for local consumption within the several Behar districts. The population of Behar being 20,412,527 souls, the consumption during the year was at the rate of 5 seers

Stocks for local consumption, both as regards licit and illicit salt.

6½ chittacks, or 10lb 13oz. per head, as against 7lb 13oz. per head

in the preceding year. The details of the trade are shown below in a comparative form for the past two years 1876-77 and 1877-78:—

AS PER INTERNAL REGISTRATION OF 1876-77.				AS PER BEHAR REGISTRATION OF 1877-78.		
DISTRICTS.	Gross import.	Gross export.	Net import.	DISTRICTS.	Gross import.	Gross export.
	Mds.	Mds.	Mds.		Mds.	Mds.
Patna	9,32,300	6,16,500	3,15,500	Patna	10,13,534	1,51,350
Gya	88,500	.....	88,500	Shahabad	2,35,703	46,077
Shahabad	1,93,000	50,500	1,42,500	Mozufferpore	17,947	28,559
Mozufferpore	1,43,400	35,100	1,08,300	Durbhunga	2,49,533	5,400
Durbhunga	1,87,700	10,700	1,77,000	Sarun	1,57,309	52,498
Sarun	2,85,500	65,300	2,20,200	Chumparun	412	12,933
Chumparun	70,600	9,000	70,600	Mouchyr	4,38,045	225
Mouchyr	2,22,000	100	2,22,500	Bhagulpore	5,30,029	10,220
Bhagulpore	1,95,700	6,700	1,89,000	Purneah	5,78,795	13,807
Purneah	3,46,500	13,000	3,33,500	Maldah	1,80,813	.....
Sonthal Pergun- nahs	83,900	21,000	62,900	Sonthal Pergun- nahs	85,629	.....
Total	27,58,700	8,28,200	19,30,500	Total	30,87,799	3,21,478
Calculated results as to rates of consumption.	Net imports as shown above.	Population of Behar (exclud- ing Mal- dah).	Consump- tion per head of the popu- lation.	Net imports (after deducting re- exports).	Population of Behar (includ- ing Mal- dah).	Consump- tion per head of the popu- lation.
	Mds.	Souls.	lb oz.	Mds.	Souls.	lb oz.
	19,30,500	19,736,101	7 13	27,66,321	20,412,527	10 13

The figures for 1876-77 include imports and exports between districts in Behar. The figures for 1877-78 do not include those figures, and, in fact, show only interprovincial traffic. The rate as calculated for 1876-77 does not include the consumption of the Maldah district, which was then within the Rajshahye Division. If, for the sake of comparison, the net imports of Maldah were added to the net imports of Behar for 1876-77, the rate per head for that year would be 8lb 4oz., instead of 7lb 13oz., as shown above.

The following is a detailed statement relating to the saltpetre-manufacturing districts of Behar for the past two years 1876-77 and 1877-78:—

NAME OF DISTRICT.	Total quantity of refined salt- petre manufactured		Quantity of pukka salt passed into consumption.	
	1876-77.	1877-78.	1876-77.	1877-78.
	Mds.	Mds.	Mds.	Mds.
Chumparun	42,703	63,261	40,697	63,261
Sarun	63,069	89,297	53,224	89,297
Mozufferpore	1,21,027	1,53,738	1,12,289	1,53,733
Durbhunga	65,634	60,638	63,135	59,838
Patna	3,566	6,928	3,059	6,938
Shahabad	3,623	6,833	3,400	6,833
Gya ... ..	.....	8,810	.....	8,810
Total	2,99,621	3,88,710	2,75,801	3,88,710

The whole question of the amount of common salt produced in the manufacture of saltpetre and illicitly passed into consumption is under consideration.

The total value of the interprovincial traffic between Bengal and other provinces in British India registered during the past two years is shown as follows :-

Frontier trade between Bengal and other provinces in British India.

		Imports into Bengal.	
		1876-77. Rs.	1877-78. Rs.
From Assam	...	3,62,17,878	3,94,51,813
„ North-Western Provinces and Oudh	...	5,37,11,514	5,62,83,506
„ Punjab	...	34,32,112	31,28,938
„ Central Provinces	...	4,02,363	11,77,330
„ Rajpootana states	...	6,94,247	3,03,221
„ Nizam's territory	...	1,000	.....
„ Madras	...	10,76,433	11,42,016
„ Bombay	...	38,959	50,044
Total	...	9,55,74,506	10,15,36,868

		Exports from Bengal.	
		1876-77. Rs.	1877-78. Rs.
Into Assam	...	1,22,99,416	1,50,42,255
„ North-Western Provinces and Oudh	...	2,94,94,840	3,79,50,837
„ Punjab	...	1,80,22,610	1,57,56,624
„ Central Provinces	...	8,87,050	14,68,218
„ Rajpootana states	...	12,51,380	12,29,505
„ Nizam's Territory	...	11,700	10,231
„ Madras	...	10,78,832	14,57,623
„ Bombay	...	3,72,810	7,55,696
Total	...	6,34,18,638	7,36,70,989

The trade in respect to the principal staples registered during the past two years is shown in the abstract statements given below:—

IMPORTS INTO BENGAL.

CHIEF STAPLES OF TRAFFIC.	From Assam.	From North-Western Provinces and Oudh.	From Punjab.	From Central Provinces	From Rajputana States.	From Nizam's Territory.	From Madras.	From Bombay.	TOTAL.		
									Quantity.	Value.	
<i>Food-grains.</i>											
Rice and paddy—	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.		Rs.
Rice not in the husk	{ 1876-77 2,15,900 1877-78 3,17,479	{ 2,45,653 3,43,328	{ 25 42	{ 16 338	{	{	{ 309	{	{ 4,61,499 3,32,547	{ 9,92,998 10,57,641	
Ditto in the husk	{ 1876-77 4,42,500 1877-78 16,14,908	{ 1,50,100 15,425	{	{	{	{	{	{	{ 6,22,600 16,20,333	{ 6,22,600 24,45,499	
Wheat	{ 1876-77 300 1877-78 2,440	{ 43,00,900 35,41,358	{ 1,00,385 6,19,650	{ 2,760 29,326	{ 1,942	{	{ 70 132	{ 118 5,945	{ 45,12,633 42,00,959	{ 90,25,266 1,26,52,657	
Gram and pulse	{ 1876-77 1,700 1877-78 625	{ 5,19,946 451,421	{ 1,44,864 49,676	{ 3,064 8,564	{ 263 301	{	{ 2,200 2,305	{ 383 192	{ 6,73,460 5,18,677	{ 11,78,557 12,54,192	
Miscellaneous spring and rain crops	{ 1876-77 1,700 1877-78 430	{ 9,93,429 1,56,553	{ 5,144 10,667	{ 842	{	{	{	{ 212	{ 10,00,278 2,08,734	{ 17,50,478 4,17,468	
Total of food-grains	{ 1876-77 6,68,000 1877-78 19,35,888	{ 62,48,933 42,58,255	{ 3,49,313 6,90,945	{ 3,870 30,270	{ 263 2,533	{	{ 2,900 3,390	{ 451 6,549	{ 72,08,495 60,06,250	{ 1,24,98,190 1,67,57,457	
<i>Fibrous products.</i>											
Jute, raw	{ 1876-77 1,47,694 1877-78 1,36,258	{ 150	{	{	{	{	{ 120 144	{	{ 1,48,294 1,36,402	{ 4,44,792 5,34,206	
Gunny-bags	{ 1876-77 1877-78	{ No. No. 1,000 16,170	{ No. No.	{ No. No.	{ No. No.	{ No. No.	{ No. No. 155,515 35,550	{ No. No.	{ No. No. 100,115 51,720	{ 35,550 11,873	
<i>Oil-seeds.</i>											
Linseed... ..	{ 1876-77 33,440 1877-78 37,285	{ 18,44,500 29,96,553	{ 60	{ 15,537 1,60,162	{ 298	{	{	{	{ 18,08,477 31,65,268	{ 75,99,908 1,26,61,672	
Mustard seed	{ 1876-77 10,44,979 1877-78 8,55,518	{ 9,32,000 16,39,307	{ 1,31,572 1,408	{ 4,309 1,507	{ 161	{	{ 372 180	{	{ 21,73,922 24,98,224	{ 84,98,258 10,24,296	

IMPORTS INTO BENGAL—continued.

CHIEF STAPLES OF TRAFFIC.	From Assam.	From North-Western Provinces and Oudh.	From Punjab.	From Central Provinces.	From Rajputana States.	From Nizam's Territory.	From Madras.	From Bombay.	TOTAL.	
									Quantity.	Value.
<i>Other products.</i>	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Rs.
Sugar—										
Refined	{ 1876-77 1877-78	140 217	6,79,570 5,65,105	..... .....	..... .....	..... .....	..... 480	..... .....	6,79,600 5,69,840	81,55,300 68,37,600
Unrefined	{ 1876-77 1877-78	600 1,600	7,33,371 4,61,451	..... .....	..... .....	..... .....	28,118 14,677	..... .....	7,32,114 4,77,308	90,48,456 19,10,092
Indigo	{ 1876-77 1877-78	..... .....	47,616 50,545	165 92	11 50	..... .....	..... .....	..... .....	41,332 50,087	83,64,400 1,01,57,400
Tea	{ 1876-77 1877-78	2,75,455 3,30,223	..... 9,540	..... 8,557	..... .....	..... .....	..... .....	..... 9	2,75,455 3,49,384	3,33,76,400 2,79,46,720
Silk	{ 1876-77 1877-78	282 169	..... 592	323 169	..... .....	2 .....	..... 6	29	641 935	3,20,501 4,68,000
Cotton, raw	{ 1876-77 1877-78	64,600 39,077	3,94,005 1,62,382	73,222 29,327	12,618 27,680	44,756 19,677	1 60	1,573 2,128	5,91,905 2,70,351	68,77,075 40,55,355
Salt-petre	{ 1876-77 1877-78	1,31,400 1,02,611	24,394 32,663	350	1,56,144 1,35,279	3,96,864 8,11,674

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EXPORTS FROM BENGAL.

CHIEF STAPLES OF TRAFFIC.	Into Assam.	Into North-Western Provinces and Oudh.	Into Punjab.	Into Central Provinces.	Into Rajputana States.	Into Nizam's Territory.	Into Madras.	Into Bombay.	TOTAL.	
									Quantity.	Value.
<i>Food-grains.</i>	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Rs.
Rice and paddy—										
Rice not in the husk	{ 1876-77 1877-78	5,21,306 4,88,114	4,82,500 13,09,243	..... .....	..... .....	..... .....	43,505 50,653	..... .....	10,69,371 18,48,009	21,58,742 55,44,027

1877-78.

Ditto in the husk	1876-77 1877-78	27,300 7,552	38,100 1,15,502	.....	.....	.....	.....	5,32,066 5,32,307	.....	5,39,366 7,58,161	5,38,399 11,37,341
Wheat	1876-77 1877-78	18,344 12,628	19,900 24,327	.....	.....	.....	.....	.....	.....	38,344 37,165	76,488 1,02,286
Gram and pulse	1876-77 1877-78	1,87,000 1,54,125	20,500 3,35,094	.....	.....	.....	.....	76,283 3,581	.....	3,02,813 4,95,500	5,57,423 1,53,300
Miscellaneous spring and rain crops	1876-77 1877-78	10,400 14,523	1,40,700 6,11,250	.....	.....	.....	.....	2,753 3,544	.....	1,53,853 6,59,347	2,09,243 18,18,634
Total of food-grains	1876-77 1877-78	77,6,440 6,76,942	6,85,700 24,28,246	.....	.....	.....	.....	6,98,204 6,98,314	.....	21,57,647 37,69,512	36,15,262 59,41,748
<i>Fibrous products.</i>		No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Gunny-bags	1876-77 1877-78	3,304	838,792 7,66,720	.....	1,619,480	Not available.	146,750	6,615	.....	331,500	837,006 25,36,407
<i>Sugar.</i>		Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Sugar, refined	1876-77 1877-78	30,570 16,400	2,060 3,490	.....	.....	.....	.....	.....	.....	38,480 20,259	4,01,160 2,44,468
Ditto, unrefined	1876-77 1877-78	86,000 54,516	5,700 40,767	.....	.....	.....	.....	520	.....	92,480 93,223	3,60,920 8,51,132
<i>Other products.</i>											
Cotton, raw	1876-77 1877-78	300 827	500 8,920	.....	.....	.....	.....	372 304	.....	1,172 6,651	17,580 48,205
Silk	1876-77 1877-78	22 9	..... 3	.....	.....	.....	.....	27 44	.....	40 56	24,500 25,000
<i>European goods.</i>		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Cotton piece-goods	1876-77 1877-78	42,72,000 40,60,146	2,51,80,900 2,58,19,616	2,68,73,920 1,31,00,143	8,42,280 10,86,522	12,13,440 11,83,064	8,900 8,776	3,450 3,700	3,45,000 2,36,500	4,57,92,340 4,38,43,117	4,57,92,340 4,38,43,117
		Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Cotton, twist and yarn	1876-77 1877-78	3,570 4,703	20,913 36,380	19,267 24,134	1,211 2,244	542 426	40	77 120	346 5,600	45,873 64,258	52,18,220 44,00,000
Salt	1876-77 1877-78	4,58,553 3,86,923	3,75,104 6,38,073	.....	.....	.....	.....	70 .....	.....	8,12,725 10,20,505	40,82,625 45,02,263

The trade with Assam, the North-Western Provinces and Oudh, and with Madras, is separately dealt with in the following pages; but the statements prepared in respect to them include in a few cases the traffic of those provinces with places other than Bengal. It is unnecessary to furnish separate returns as regards the trade with the Punjab, the Central Provinces, Rajpootana, Bombay, and the Nizam's territory, because the registration is effected in respect only to the principal staples of traffic imported into and exported from Calcutta by rail, and the details have been already shown in the preceding statements.

The total value of the interprovincial trade of Bengal with Assam registered during the past two years was as follows:—

	Exports from Assam into Bengal.		Imports from Bengal into Assam.	
	1876-77.	1877-78.	1876-77.	1877-78.
	Rs.	Rs.	Rs.	Rs.
By boat	1,37,73,869	1,25,58,533	60,96,982	39,51,014
„ steamer	2,24,41,009	2,68,93,280	62,02,474	1,10,91,241
Total	3,62,17,878	3,94,51,813	1,22,99,456	1,50,42,255

The trade of Bengal with Assam in the principal staples registered on the different routes during the past two years is shown in the accompanying statements:—

LIST OF ARTICLES.		EXPORTS FROM ASSAM INTO BENGAL			
		By Land.	By steamer.	TOTAL.	
				Quantity.	Value.
				Mds.	Rs.
Tea (Indian)	Mds.	1876-77	11,870	2,66,585	2,78,455
		1877-78	12,496	3,18,432	2,22,76,400
Mustard seed	"	1876-77	9,41,537	99,522	10,34,079
		1877-78	7,22,834	1,32,684	41,36,316
Linsced	"	1876-77	38,500	140	38,440
		1877-78	29,650	67	29,697
Timber	"	1876-77	11,17,369	.....	11,17,369
		1877-78	6,96,242	20	33,52,107
Cotton, raw	"	1876-77	64,900	.....	64,900
		1877-78	38,882	195	9,73,500
Rice	"	1876-77	2,15,800	.....	2,15,800
		1877-78	3,14,902	2,577	3,17,479
Paddy	"	1876-77	4,42,500	.....	4,42,500
		1877-78	16,14,908	.....	24,22,362
Lime and limestone	"	1876-77	10,54,199	1,960	10,56,159
		1877-78	7,94,393	4,892	7,42,118
Sticks and other kinds of lac	"	1876-77	23,800	3,727	27,533
		1877-78	800	3,321	4,121
Lac-dye	"	1876-77	11,279	.....	11,279
		1877-78	17,015	.....	1,69,185
Caoutchouc	"	1876-77	522	9,690	10,212
		1877-78	771	9,072	5,37,150
Jute, raw	"	1876-77	1,35,878	12,116	1,47,594
		1877-78	1,60,431	25,527	4,43,982

A maund of paddy is equivalent to 25 seers of rice.

The following statement shows all the Bengal districts which imported rice and paddy from Assam during the past two years :—

NAMES OF IMPORTING DISTRICTS.	Rice.		Paddy.*		Total in rice.	
	1876-77.	1877-78.	1876-77.	1877-78.	1876-77.	1877-78.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Dacca	62,800	1,16,562	3,75,700	11,39,993	2,97,612	8,29,357
Calcutta	1,21,000	1,42,451	2,500	24,632	1,22,562	1,57,846
Backergunge	17,800	12,880	17,600	1,50,835	28,800	1,97,158
Mymensingh	4,900	10,595	10,300	67,835	11,338	52,992
Furzedpore	3,500	9,935	18,200	1,21,945	14,875	85,250
Pabna	2,200	2,386	1,800	7,870	3,925	7,905
Nuddea ... ..	.....	1,920	.....	6,902	.....	6,291
Patna ... ..	.....	9,270	.....	.....	.....	9,270
Noakholly ... ..	.....	600	.....	7,422	.....	5,238
Tippurah ... ..	.....	1,025	.....	85,248	.....	54,305
Other districts	3,600	10,155	.....	2,126	13,850	11,783
Total	2,15,800	3,17,479	4,42,500	16,14,908	4,92,362	13,26,796

A maund of paddy is equivalent to 25 seers of rice.

A similar statement shows the exporting districts of Bengal from which rice was imported into Assam during the past two years :—

NAMES OF EXPORTING DISTRICTS.	Rice.		Paddy.*		Total in rice.	
	1876-77.	1877-78.	1876-77.	1877-78.	1876-77.	1877-78.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Pabna	2,10,100	3,35,203	500	984	2,10,412	3,35,918
Ramapore	79,500	56,792	6,300	5,493	83,438	60,227
Dacca	65,430	50,115	2,300	975	66,837	50,724
Furzedpore	55,100	20,703	500	.....	55,413	20,703
Mymensingh	45,800	5,277	2,100	100	47,112	5,399
Tippurah	25,100	3,292	1,600	.....	26,100	3,292
Backergunge	17,700	.....	8,100	.....	22,763	.....
Calcutta	20,200	14,190	.....	.....	20,200	14,190
Nuddea	3,600	1,942	.....	.....	3,600	1,941
Bozra ... ..	.....	500	.....	.....	.....	500
Other districts	866	.....	5,900	.....	4,553	.....
Total	5,25,366	4,88,114	27,300	7,552	5,40,428	4,92,834

* A maund of paddy is equivalent to 25 seers of rice.

The total value of the interprovincial trade of Bengal with the North-Western Provinces and Oudh registered during the past two years was as follows :—

Years.	Into Bengal from North-Western Provinces and Oudh.	From Bengal into North-Western Provinces and Oudh.
Rs.	Rs.	Rs.
1876-77	5,37,11,514	2,94,94,840
1877-78	5,62,83,506	3,79,50,837

The interprovincial trade with Bengal in the principal staples for the past two years is shown in the accompanying statement according to the nature of the route followed:—

LIST OF ARTICLES.	EXPORTS FROM THE NORTH-WESTERN PROVINCES AND OUDH								IMPORTS INTO THE NORTH-WESTERN PROVINCES AND OUDH							
	Into Bengal.								From Bengal.							
	By boat.				By rail.				By boat.				By rail.			
	Total.				Total.				Total.				Total.			
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	1877-78.	1877-78.	1877-78.	1877-78.	1877-78.	1877-78.	1877-78.	1877-78.	1877-78.	1877-78.	1877-78.	1877-78.	1877-78.	1877-78.	1877-78.	1877-78.
Poor-grains—	Mds.	Mds.	Mds.	Mds.	Mds.	Rs.	Rs.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Rs.	Rs.	
Wheat	5,18,674	20,12,704	9,261	48,09,300	35,41,328	86,19,606	97,88,679	23,741	.....	559	19,900	21,327	80,800	68,598		
Pulses and gram	2,07,438	2,57,747	16,045	5,29,906	4,51,221	9,00,995	11,28,052	3,35,640	.....	2,454	29,500	3,88,004	51,625	8,45,235		
Rice	26,125	7,823	3800	2,45,058	51,321	4,91,316	1,02,284	1,12,409	.....	99,771	4,62,500	13,00,213	9,27,000	39,27,729		
Paddy	15,423	.....	.....	1,94,100	15,425	1,29,100	29,157	1,13,407	.....	1,805	33,100	1,13,392	33,100	1,72,953		
Miscellaneous spring and rain crops.	1,54,658	11,152	513	9,93,129	1,96,355	17,53,500	3,93,106	6,14,447	.....	26,535	1,46,700	6,41,280	2,46,225	12,52,500		
Total of food-grains ...	9,32,521	32,50,445	26,809	62,48,639	42,38,967	1,19,20,421	1,18,55,853	22,99,797	...	1,28,449	6,35,700	21,38,246	12,96,750	62,95,876		
Oil-seeds—																
Linseed	17,43,115	12,18,707	5,131	18,41,300	29,68,953	73,73,000	1,18,07,512	1,148	.....	.....	6,500	1,148	27,200	4,302		
Mustard seed	3,76,705	7,53,102	4,702	9,52,900	16,39,307	35,11,600	65,58,023	3,136	.....	.....	13,600	3,136	54,400	12,544		
Sugar—																
Refined	5,15,062	.....	54,041	6,73,500	5,29,103	91,54,000	68,29,236	662	.....	3,207	2,600	3,500	84,800	46,798		
Unrefined	4,55,070	.....	6,161	7,23,351	4,61,231	25,39,424	18,44,924	227	.....	40,540	5,300	40,707	21,200	1,69,068		
Other products—																
Indigo	9,582	48,411	332	4,18,46	50,545	83,29,200	1,00,00,000	.....	.....	.....	.....	.....	.....	.....
Cotton, raw	4,705	1,17,050	5,130	3,91,005	1,62,382	30,10,075	2,33,750	60	.....	5,990	500	5,920	7,500	88,800		
Saltpetre	3,215	9,418	918	1,31,400	1,02,611	7,38,400	6,15,666	1,409	.....	.....	.....	1,400	.....	8,904		
Gummi-baz	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.		
European goods—	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
Cotton piece-goods ...	.....	.....	57,071	60,300	57,071	60,300	57,071	77,300	2,31,09,635	1,52,711	2,54,69,300	2,33,19,640	2,54,69,300	2,33,19,640		
Cotton twist and yarn ...	Mds.	Mds.	Mds.	Mds.	Mds.	.....	.....	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.		
Salt	175	.....	.....	2,300	175	14,000	785	4,31,820	1,65,900	46,955	3,76,100	6,33,575	18,80,500	25,51,058		

In consequence of the abolition of the registration station at Patna, the Ganges-borne trade between Behar and the Upper Provinces was not registered during the last quarter of the year under review. Besides, the railway figures merely show the imports into, and exports from, Calcutta in the principal staples of traffic.

The total value of the registered land trade between Bengal and Madras during the past two years was—

				Into Bengal from Madras.	From Bengal into Madras.
				Rs.	Rs.
1876-77	...	...	...	10,76,433	10,78,832
1877-78	...	...	...	11,42,016	14,57,623

The principal items of this interprovincial trade are—

				Imports from Ganjam into Orissa.	
				1876-77.	1877-78.
				Rs.	Rs.
Salt	...	...	...	5,16,125	7,23,794
Ghee	...	...	...	56,100	94,320
Unrefined sugar	...	...	...	1,12,572	58,708
Piece-goods (Indian)	...	...	...	56,550	58,226
Turmeric	...	...	...	46,926	44,352

				Exports from Orissa into Ganjam.	
				1876-77.	1877-78.
				Rs.	Rs.
Paddy	...	...	...	5,32,966	9,52,960
Rice	...	...	...	1,67,010	1,51,956
Brass and copper	...	...	...	89,520	34,560
Iron and its manufactures...	...	...	...	27,690	32,160
Silk, raw	...	...	...	13,500	22,000

It has not been found possible to organize in Bengal at any reasonable cost a system of complete registration of the frontier trade with Nepal and the neighbouring states. There is along the greater part of the frontier no natural boundary between British territory and that of Nepal; and though the registering stations which are kept up have been placed at the most important points, they cannot completely intercept the frontier traffic. As the Government of India, however, have since directed that the registration of traffic with Nepal, Sikkim, and Bhutan should be continued, steps will be taken for as complete a registration of this traffic as possible. The details of the trade with Nepal, Bhutan, and Sikkim, as registered during the past year, are given below.

The following is an abstract of the trade registered during the past two years:—

Exported from Bengal into—				1876-77.	1876-78.
Nepal	...	...	...	46,75,009	45,54,661
Sikkim	...	...	...	1,41,647	16,589
Bhutan	...	...	...	7,590	33,997
Total				48,24,246	46,05,247

Imported into Bengal from—

			1876-77.	1877-78.
			Rs.	Rs.
Nepal	...	...	55,07,816	70,29,566
Sikkim	...	...	8,02,657	18,222
Bhutan	...	...	12,708	18,666
Total			63,23,181	70,66,454

The total value of the trade of Bengal with Nepal during the past two years was as follows:—

From Bengal into Nepal.

				Rs.
876-77	...	...	...	46,75,009
877-78	...	...	...	45,54,661

Into Bengal from Nepal.

1876-77	...	...	...	55,07,816
1877-78	...	...	...	70,29,566

The following statement shows the values of the principal exports and imports:—

From Bengal into Nepal.

			1876-77.	1877-78.
			Rs.	Rs.
European cotton piece-goods	...	...	14,41,176	15,36,956
Indian " "	...	...	3,84,907	1,90,189
Salt	...	...	3,89,300	3,24,464
Cattle	...	...	3,01,590	5,27,820
Sugar, refined	...	...	1,47,588	79,140
" unrefined	...	...	98,400	88,332
Cotton	...	...	1,66,575	71,880
Brass and copper	...	...	2,08,560	2,25,560

Into Bengal from Nepal.

Cattle	...	...	14,35,410	10,76,340
Gram and pulse	...	...	1,32,592	2,24,632
Other spring crops	...	...	1,61,574	85,218
Rice	...	...	5,41,564	12,99,570
Paddy	...	...	3,26,293	8,00,657
Other rain crops	...	...	3,15,943	4,85,770
Linseed	...	...	5,56,360	10,19,876
Mustard seed	...	...	4,40,440	3,94,956
Timber	...	...	2,90,670	1,47,957

The statement below shows the places of supply in respect to the principal staples, aforementioned imported into Nepal during 1877-78 as compared with the trade of the preceding year:—

Imports into Nepal.

NAMES OF EXPORTING DISTRICTS.		Cotton piece-goods (European).	Cotton piece-goods (Indian).	Salt.	Cattle.	SUGAR.		Cotton, raw.	Brass and copper.
		Rs.	Rs.	Mds.	No.	Re-fined.	Un-refined.	Mds.	Mds.
Calcutta ...	{ 1876-77 1877-78	3,41,300 7,31,400	..... 400	2,600 600	..... .....	..... .....	..... .....	300 100	2,100 2,500
Patna ...	{ 1876-77 1877-78	2,29,800 47,900	5,800 5,600	100 300	..... .....	..... 100	..... 400	900 200	700 400
Mozufferpore ...	{ 1876-77 1877-78	1,45,900 69,400	38,600 29,800	35,100 28,000	4,700 4,200	2,600 1,500	5,400 3,700	1,000 700	600 100
Sarun ...	{ 1876-77 1877-78	1,12,200 35,100	61,100 33,800	10,300 400	100	1,000 600	3,600 2,100	1,300 400	200
Chumparan ...	{ 1876-77 1877-78	2,69,100 3,81,800	37,100 56,000	9,000 12,900	1,100 6,500	6,100 2,800	6,900 5,600	3,600 3,200	600 900
Bhagulpore ...	{ 1876-77 1877-78	63,000 91,800	7,100 7,900	6,700 10,200	600 1,200	200 300	1,100 2,200	100 100	..... 100
Purneah ...	{ 1876-77 1877-78	1,36,200 1,65,400	19,300 35,000	12,300 13,800	2,700 3,200	200 1,200	4,800 6,200	200 100	200 1,500
Durbhunga ...	{ 1876-77 1877-78	17,100 9,500	51,000 20,200	1,000 5,600	600 2,500	1,800 200	2,200 1,900	100 .....	..... 100
Other districts ...	{ 1876-77 1877-78	93,600 1,700	1,61,900 1,500	800 300	300	400	600	3,700	500
Total ...	{ 1876-77 1877-78	14,11,200 15,37,000	3,81,900 1,90,200	77,900 72,100	10,100 17,600	12,300 6,700	24,600 22,100	11,100 4,800	5,200 6,600

A similar statement has been prepared for food-grains and oil-seeds, which are the principal imports into Bengal from Nepal:—

Exports from Nepal.

IMPORTING DISTRICTS.		Rice.	Paddy.	Linseed.	Mustard.
		Mds.	Mds.	Mds.	Mds.
Mozufferpore ...	{ 1876-77 1877-78	1,45,600 1,56,600	50,700 87,500	95,600 1,65,600	37,900 39,400
Durbhunga ...	{ 1876-77 1877-78	14,500 10,500	69,100 51,800	5,800 10,600	12,600 4,300
Sarun ...	{ 1876-77 1877-78	47,700 91,000	7,400 56,200	400 1,200	1,200 1,300
Chumparan ...	{ 1876-77 1877-78	19,000 82,300	1,04,900 2,02,700	23,700 59,200	21,500 14,300
Bhagulpore ...	{ 1876-77 1877-78	7,700 12,400	20,500 19,900	3,900 5,000	19,400 21,200
Purneah ...	{ 1876-77 1877-78	19,200 65,300	62,200 1,16,300	1,700 7,800	14,800 16,300
Other districts ...	{ 1876-77 1877-78	17,100 14,500	2,500 600	8,000 5,600	2,700 1,900
Total	{ 1876-77 1877-78	2,70,800 4,33,200	3,26,300 5,38,700	1,39,100 2,56,000	1,10,100 98,700

The following statement shows the total imports and exports of each staple of traffic registered at Runjeet, a station between Darjeeling and Sikkim, during the year 1877-78 as compared with the totals for the preceding year, 1876-77:—

No.	LIST OF ARTICLES.	IMPORT INTO DARJEE- LING FROM SIKKIM.				EXPORT FROM DARJEE- LING INTO SIKKIM.			
		TOTAL QUANTITY.		TOTAL VALUE.		TOTAL QUANTITY.		TOTAL VALUE.	
		1876-77.	1877-78.	1876-77.	1877-78.	1876-77.	1877-78.	1876-77.	1877-78.
I	Animals, living (for sale)—							Rs.	Rs.
	1.—Horses, ponies, and mules ... No.	41	...	2,050	...	30	...	1,500	...
	2.—Cattle	637	205	19,710	6,150	774	52	28,220	1,500
	3.—Sheep and goats	1,965	154	3,330	308	1,053	127	2,190	254
	4.—Other kinds	584	317	1,168	634	254	...	508	...
IIa	Building materials—								
	1.—Lime and lime- stone ... Mds.	3,183	78	2,387	58	...	...	...	...
VI	Coal and coke	313	65	150	28	3	...	2	...
VII	Cotton, raw	410	...	6,600	...	...	...	195	...
VIII	Cotton, manufactured—								
	1.—Twist and yarn (European) ... ..	...	...	...	...	5	...	350	...
	3.—Piece-goods (European) ... Rs.	...	...	...	...	...	...	4,017	...
	4.—Piece-goods (In- dian) ... ..	...	...	3,466	...	...	...	8,956	3,379
IX	Drugs and medicines—								
	2.—Other sorts, not intoxicating ... ..	...	...	192	...	...	...	100	...
	3.—Intoxicating drugs (other than opium) ... Mds.	194	253	1,510	2,530	...	...	...	...
X	Dyeing materials—								
	1.—Indigo ... ..	...	...	...	...	336	12	60,000	2,400
	5.—Other kinds	9	12	45	60	...	...	...	...
XII	Fibrous products—								
	4.—Other fibres, ma- nufactured ... ..	...	...	...	...	1	...	8	...
XIII	Fruits and nuts—								
	2.—All other kinds	863	...	2,589	...	...	...	...	...
XIV	Grain and pulse—								
	2.—Gram and pulse	186	7	326	18	6	...	1	...
	3.—Other spring crops	35	...	61	...	327	...	572	...
	4.—Rice, husked	865	...	1,730	...	369	61	738	183
	5.—Do., unhusked	92	...	92	...	...	...	...	...
	6.—Other rain crops	8,261	1,623	14,457	3,016	...	...	...	...
XVI	Hides and skins—								
	1.—Hides of cattle ... No.	688	358	1,376	716	141	...	282	...
	2.—Skins of sheep, goats, and small animals	174	...	80	...	34	...	17	...

No.	LIST OF ARTICLES.	IMPORT INTO DARJEE- LING FROM SIKHIM.				EXPORT FROM DARJEE- LING INTO SIKHIM.			
		TOTAL QUANTITY.		TOTAL VALUE.		TOTAL QUANTITY.		TOTAL VALUE.	
		1876-77.	1877-78.	1876-77.	1877-78.	1876-77.	1877-78.	1876-77.	1877-78.
XVIII	Lac—							Rs.	Rs.
	1.—Dye Mds.	.....	...	.....	.....	6	...	96	.....
	2.—Shell "	11	13	330	390	16	...	450	.....
	3.—Stick and other kinds "	1	...	15	.....	...	...	.....	.....
XIX	Leather—								
	2.—Manufactured ... Rs.	.....	...	55	.....	...	...	32	.....
XXII	Metals and manufac- tures of metals—								
	1.—Brass and copper Mds.	231	83	9,340	3,320	363	112	14,520	4,480
	2.—Iron "	6	...	60	.....	321	72	3,219	720
	3.—Other metals ... "	8	...	120	.....	14	...	210	.....
XXIII	Oils "	6	6	72	72	11	...	132	.....
XXV	Paints and colours ... "	17	...	1,105	.....	...	...	.....	.....
XXVI	Provisions—								
	1.—Glue Mds.	226	32	4,520	640	...	...	.....	.....
	2.—Other kinds ... "	3,258	84	9,774	252	171	...	513	.....
XXVII	Salt "	732	...	3,660	.....	17	248	85	1,116
XXVIII	Saltpetre, &c.—								
	2.—Saltpetre "	204	...	1,224	.....	...	...	.....	.....
XXIX	Seeds—								
	1.—Oil-seeds— c.—Til or gin- nelly ... .. "	.....	...	.....	.....	65	...	285	.....
	d.—Other oil- seeds ... .. "	.....	...	.....	.....	23	.....	...	52
XXX	Silk—								
	2.—Manufactured ... Rs.	.....	...	.....	.....	...	...	750	.....
XXXI	Spices Mds.	78	...	390	.....	38	...	190	.....
XXXIII	Sugar—								
	1.—Refined ... .. "	.....	...	.....	.....	70	.....	840	.....
	2.—Unrefined ... .. "	.....	...	.....	.....	356	...	1,424	.....
XXXIV	Tea—								
	1.—Indian "	15	...	1,900	.....	1	...	80	.....
XXXV	Tobacco "	26	...	130	.....	1,035	281	9,675	1,405
XXXVI	Wood—								
	1.—Timber "	2,36,236	...	7,08,708	.....	...	...	.....	.....
XXXVII	Wool—								
	2.—Manufactured (piece-goods) ... Rs.	.....	...	226	.....	...	...	384	.....
XXXVIII	All other articles of merchandise—								
	1.—Unmanufactured ... "	.....	...	2	.....	...	...	.....	.....
	2.—Manufactured ... "	.....	...	65	.....	...	...	435	.....
	Total Value ... ..	.....	...	8,02,657	18,222	...	...	1,41,647	16,589

The following statement shows the total imports and exports of each staple of traffic registered at Buxa, a station between Julpigoree and Bhutan, during the years 1877-78, as compared with the totals for the preceding year, 1876-77:—

No.	LIST OF ARTICLES.	IMPORTS INTO JULPIGOREE FROM BHUTAN.				EXPORTS FROM JULPIGOREE INTO BHUTAN.			
		TOTAL QUANTITY.		TOTAL VALUE.		TOTAL QUANTITY.		TOTAL VALUE.	
		1876-77.	1877-78.	1876-77.	1877-78.	1876-77.	1877-78.	1876-77.	1877-78.
	Animals living (for sale)—								
	1.—Horses, ponies, and mules No.	97	20	4,850	1,000	...	10	.....	500
	2.—Cattle "	...	43	.....	1,290	1	...	30	.....
	3.—Sheep and goats "	5	352	10	704	2	...	4	.....
	4.—Other kinds "	...	657	...	1,314	6	...	12	.....
VII	Cotton, raw Mds.	208	...	3,120	.....	40	73	600	1,095
VIII	Cotton, manufactured—								
	2.—Twist and yarn (Indian) ... .. "	...	...	.....	.....	...	1	.....	40
	3.—Piece-goods (European) Rs.	...	...	.....	.....	...	...	138	13,282
	4.—Piece-goods (Indian) ... .. "	...	...	137	146	...	...	88	...
	Dyeing materials—								
	2.—Madder or manjit... Mds.	14	90	112	720	...	...	...	...
	5.—Other kinds ... .. "	...	...	.....	.....	145	...	725	.....
XIII	Fruits and nuts—								
	2.—All other kinds "	...	73	.....	219	...	...	.....	...
XIV	Grain and pulse—								
	2.—Gram and pulse ... .. "	...	...	.....	.....	...	14	...	35
	4.—Rice, husked ... .. "	...	...	.....	...	158	395	316	1,185
	5.—" unhusked ... .. "	...	...	.....	...	1,171	...	1,117	.....
XVIII	Lac—								
	1.—Dye "	...	2	...	30	...	...	.....	.....
	2.—Shell... .. "	20	...	600	...	...	...	.....	.....
	8.—Stick and other kinds "	...	8	...	120	...	...	.....	.....
XXII	Metals and manufactures of metals—								
	1.—Brass and copper... .. "	...	...	.....	.....	...	6	...	240
	2.—Iron ... .. "	...	...	.....	.....	...	10	...	100
XXIII	Oils "	...	1	.....	12	1	5	12	60
XXVI	Provisions—								
	1.—Rice "	9	28	180	560	...	...	.....	.....
	2.—Other kinds "	...	215	...	785	...	...	.....	.....
XXVII	Salt ... .. "	...	...	...	...	145	7	725	32
XXIX	Seeds—								
	1.—Oilseeds—								
	6.—Mustard and rapeseed "	40	...	160	.....	...	...	.....	.....
XXX	Silk—								
	2.—Manufactured Rs.	...	...	...	...	...	...	18	...
XXXI	Spices Mds.	...	12	...	30	...	191	...	955
	Betelnuts ... .. "	...	...	...	...	125	1,450	750	8,700
XXXIII	Sugar—								
	1.—Refined ... .. "	...	...	...	...	...	...	...	48
	2.—Unrefined ... .. "	...	...	...	...	291	70	1,164	280
XXXV	Tobacco ... .. "	...	...	...	...	351	1,406	1,755	7,030
XXXVI	Wood—								
	2.—Firewood "	...	1,660	...	417	...	...	...	...
XXXVII	Wool—								
	2.—Manufactured (piece-goods) k.	...	...	3,535	8,086	...	...	...	400
XXXVIII	All other articles of merchandise—								
	1.—Unmanufactured ... .. "	...	...	...	93	...	...	...	15
	2.—Manufactured ... .. "	...	...	4	3,160	...	...	82	...
	Total value ... ..	...	...	12,708	18,666	...	...	7,590	33,997

Roads, Canals, and other Public Works.

THE total expenditure on public works in Bengal during the year 1877-78 amounted to Rs. 1,09,69,803, which was distributed as follows:—

					Rs.
Imperial	...	{	Guaranteed railways	...	1,98,904
			Military and other services	...	4,54,570
			Irrigation	...	36,00,053
Provincial	...				28,93,147
District road works	...				31,66,743
Local funds	...				80,943
Total direct expenditure on works from Public Works funds					1,03,92,357*
Contributions	...	...	...	...	2,36,890
Treasury outlay	...	...	...	...	3,36,429
Local loans	...	...	...	...	4,127
Total					5,77,446
Grand Total					1,09,69,803

* Inclusive of Rs. 3,151 expended in England on account of stores.

The total direct outlay on works from Public Works funds amounted, it will be seen, to 104 lakhs of rupees, rather more than one-third of which was expended on irrigation works and guaranteed railways; one-third on ordinary provincial, military, and other imperial services; and the remainder on district works.

This section has reference to all works classed as '*ordinary*' or '*general*;' that is to say, to all public works except those included under the headings '*Guaranteed Railways*' and '*Irrigation*,' which are dealt with in separate sections of this report.

The expenditure on imperial works during the year amounted to Rs. 4,52,570, of which Rs. 42,662 were incurred on military works and Rs. 4,09,908 on civil buildings.

The imperial civil buildings under this Government are those connected with the administration of the Government of India at the presidency, and the Salt, Postal, Telegraph, and Opium buildings throughout the province. Of Rs. 4,09,908 expended on imperial civil buildings, Rs. 2,39,050 were incurred on account of original works and Rs. 1,70,858 on

maintenance and repairs. Besides the above amounts Rs. 77,212 were expended on the internal fittings of the Museum, which was nearly completed.

The inconvenience and expense of periodically examining and changing beams in the roof of the large ball-room at Government House, Calcutta, and the state of the roof, led to a proposal to substitute iron for the more perishable material wood. The work was commenced in 1876-77 and has been in progress during the year, but was not completed, for though it is a work that does not involve a large outlay, it is one that takes time and can only be carried on when His Excellency the Viceroy is absent from Calcutta.

The Imperial Museum, completed in 1876-77, has this year been supplied at considerable expense with cabinets and handsome show-cases for the display of the valuable collections it possesses. The building is now completely supplied with fittings, with the exception of the ethnological gallery.

The expenditure incurred on the other imperial buildings was of a trivial character, and requires no mention here.

Owing to the completion of the large imperial buildings in Calcutta, and to the consequent reduction in the demand for building materials, the operations of the brick factory at Akra have been carried on on a reduced scale for the past two years, and the Government of India have decided that the factory should be entirely made over to the local Government from the end of the year, on the understanding that future imperial requirements would continue to be met. The factory has been abolished as a separate division from the 1st April 1877, and incorporated with the Circular and Eastern Canals Division. The large stock of bricks in hand would have called for the entire closing of the factory for a time, but it was considered imperatively necessary for the efficiency of the factory to continue work in order to keep its hands from being dispersed, and to maintain such a valuable field for the practical training of young native engineers as Akra afforded.

Provincial works consist of all those works the outlay on which would have been met from imperial resources before the system of provincial services was introduced, as well as of certain undertakings the cost of which has always been defrayed from funds specially raised for the purpose. These latter works are the maintenance of water communication between Calcutta and the Eastern Districts of Bengal, the preservation and improvement of the channels of the Nuddea rivers, the maintenance of ferries and staging bungalows on the main lines of communication, and the conservation of the Strand Bank and Eden Gardens, Calcutta.

The outlay on provincial works during the year was Rs. 28,93,147, distributed as follows :—

				Rs.
Civil buildings	...	...	...	11,10,439
Communications	...	...	...	16,81,278
Miscellaneous public improvements	...	...	...	1,01,430

In addition to the above the following sums were expended from contributions received from various sources :—

	Rs.
Education	15,903
Medical	30,738
Ecclesiastical (churches)	630
Land revenue	50
Excise	59
Monuments and antiquities	2,480
Miscellaneous or general	1,386
Communications	877
Miscellaneous public improvements	45,330
Establishment	370
Total	97,823

The difference between this amount and Rs. 2,36,890 entered as the expenditure from contributions at the commencement of this chapter was disbursed by the Irrigation Branch of this department.

The expenditure incurred on civil buildings from provincial funds on account of each department of the provincial administration is shown in the following table :—

	Original works.	Repairs.	Total.
	Rs.	Rs.	Rs.
Land revenue	25,023	1,04,006	1,29,032
Excise	6,178	8,204	14,382
Customs	1,438	8,352	9,790
Stamps and Stationery	676	6,944	7,620
Residences for local Governments	1,53,967	13,191	1,67,158
Secretariat Offices	34,373	14,462	48,835
Board of Revenue		608	608
Minor Departments—			
Museum	5,327	72	5,399
Monuments and antiquaries	1,419	825	2,244
Law and Justice—			
High Courts	1,638	15,162	16,800
Small Cause Courts		1,040	1,040
District Courts	88,773	44,064	1,32,837
Ecclesiastical—			
Bishop's Palace	1,174	2,246	3,420
Churches	7,306	11,569	18,875
Burial grounds	38,036	5,008	43,044
Jails—			
Central Jails	51,254	5,150	56,404
District Jails	1,28,098	51,797	1,79,897
Other buildings, such as lock-ups, hajuts, &c.	6,443	12,767	19,210
Police	10,105	7,775	17,880
Registration	51,609	16	51,625
Education—			
Government colleges	21,436	51,563	72,999
Ditto schools	25,103	17,102	42,205
Hospitals and dispensaries	10,750	27,060	37,810
Lock-hospitals		585	585
Medical colleges and schools	27,809	11,105	38,914
Lunatic Asylums	14,668	8,604	23,272
Miscellaneous or general	11,310	10,519	21,829
Public works	10,880	5,597	16,477
Total	6,63,834	4,46,005	11,10,429

The system introduced three years ago for the repair of roads and buildings in a systematic manner, and after fixed intervals, has generally worked satisfactorily, and strict adherence to the rules will be required in future. As matters

Repairs.

now stand, the professional officers put a building into thorough order every fourth year, and all ordinary intermediate repairs that may be required are carried out by the officers occupying the buildings.

A serious fire occurred at Julpigoree, on the 24th March 1878, which destroyed some temporary buildings occupied as a court-house by the Commissioners and other officers.

Alterations were made to the Economic Museum to admit of the specimens being displayed to better advantage, and to provide improved office accommodation.

Muséums.

Foley's fine and much-admired equestrian statue of the late Lord Canning was successfully erected in a very short time on the site selected for it near the Eden Gardens, and was publicly unveiled by His Excellency the Viceroy in March 1878.

Monuments.

The conversion of the stud buildings at Buxar into a central jail has been pushed on. A million and a half of bricks were burnt, and other materials collected; the boundary wall was nearly completed; the additions and alterations required to convert three of the stables into sleeping barracks were almost finished; the construction of a woollen factory at the Bhagulpore central jail was commenced, and minor works were carried out in the central and district jails.

Jail buildings.

The Reformatory School at Alipore, Calcutta, on the separate-cell system has been completed. The boys' dormitory has been fitted up, workshops provided, and the Governor's house built.

Extensive additions and alterations to some of the buildings in the Presidency Jail were in hand to provide accommodation for the printing press which has been removed from the Alipore Jail for the purpose of forming the nucleus of a central printing establishment, from which much economy is expected.

Owing to various causes the progress made in the construction of some educational buildings has not been so great as was anticipated. The design for the Madrissa College at Bauleah by the Special Architect, Major C. Mant, R.E., could not be carried out with the funds available, and the design had to be altered. This caused delay, and nothing could be done beyond the collection of material. The construction of the Madrissa College at Dacca could not be commenced until February owing to the money required not having been paid into the treasury.

Educational buildings.

The conversion of Mr. Sherman's house at Sealdah, in the suburbs of Calcutta, into a hospital for blind and incurables was proceeded with as far as funds would permit. The alterations to the main building were finished, the walls of the new wings built, and the roof of the west wing completed. This work is being carried out from voluntary subscriptions, and it is reported that both European and Native gentlemen have liberally contributed towards it.

Medical buildings.

The theatre of the Campbell Medical School at Sealdah, a handsome building designed by Major C. Mant, R.E., and containing a lecture-room, museum, and library, was completed and occupied.

A building to provide accommodation for the nurses attached to the General Hospital was commenced during the year on the west side of the hospital compound. The first story was completed and roofed in: the second story was in hand, and the out-offices commenced.

Water has been laid on to the Calcutta Medical College Hospital, and a serious want remedied.

A new out-door dispensary has been built in connection with the Temple Medical School at Bankipore.

Miscellaneous.

A transit room and additional out-rooms for the Alipore Observatory were well advanced when

the year closed.

Communications.

These are divided into the two main heads of provincial and local, and comprise both roads

and water routes.

Roads.

The expenditure on provincial roads has been almost exclusively confined to keeping the main lines of communication in repair, and to the substitution of stone for brick metal on the roads in the neighbourhood of Calcutta, where the latter material has been found totally unable to bear the increasing traffic. The construction of the suspension bridge over the Teesta had to be stopped in December, as the floods of 1877 showed that the height of the floods had been much underestimated, and that the roadway of the bridge would have to be considerably raised.

Floods.

No serious damage was done by floods during 1877-78 except on the road between Chittagong and Commillah. From Chittagong northwards the road runs along a narrow patch of flat country bordered by hills on the east side and the Bay of Bengal on the west. The streams issuing from these hills, swollen by the heavy rains of July and August, flooded and breached the 11th mile of the road, and did considerable injury to four bridges. The damage done was repaired within the year. The construction of two additional bridges has since been sanctioned, and the question of still further increasing the waterway is under consideration.

The rapidity with which silt accumulates in the Calcutta Canals owing to the meeting of the tides and to the deposit of silt brought in by the storm waters from the Calcutta drainage has long attracted attention, and a scheme has been under consideration for forming a portion of the canal near Calcutta into a harbour by placing a lock at Dhappa toll-house, which is situated at the junction of two branches of the canal. This lock will provide a safe and convenient harbour, where the boat traffic of Eastern Bengal will find many conveniences. This measure for diverting the storm water will enable the largest native boats, and even small steamers, to pass through the Calcutta Canals into the Hooghly at all stages of the tide. The project also contemplates cutting off the discharge of the storm waters of the northern parts of Calcutta, which at present are poured into the canal in increasing volume as the drainage of the city progresses. This water is more or less impregnated with sewage matter, and its exclusion from the canal and conveyance to a distance will benefit the public health and be of great sanitary importance to Calcutta and its Suburbs. The

scheme is well advanced, and will probably be commenced early in the following year. It had been intended to erect new iron girder bridges over the canal at Chitpore, Gurreeh, and Dum-Dum; but these works were held in abeyance pending the settlement of the proposal to lock the canal, as if this were carried out it would be requisite to modify the design of the bridges so as to give more headway, and thus admit of larger craft and small steamers passing under them.

Efficient arrangements have been organized for the removal of snags from the large steamer route in the Sunderbun rivers, and they have produced satisfactory results. Measures for further improving the eastern canals route are under consideration and inquiry.

Two of the Nuddea rivers, the Bhagiruthee and Jellinghee, were kept

Nuddea rivers.

well open, but the Matabhanga was not worked.

The gross revenue derived from the tolls on these rivers amounted to Rs. 3,24,940, being the largest amount collected in any year since the tolls were established, more than fifty years ago. From this, and from the high average the receipts have maintained for some years, it is evident that the fears once entertained that the East Indian and Eastern Bengal Railways would gradually destroy the traffic on the Nuddea Rivers were altogether groundless.

The expenditure under the head of local funds represents the outlay on works connected with the Chittagong port and the Nizamut buildings.

Local funds.

The beacon light at Norman's Point, at the entrance of the Kurnafulee river leading to Chittagong, the safety of which was endangered by last year's cyclone wave,

Chittagong Port Fund.

has been removed to a more sheltered locality. It has been decided to replace the wooden jetty at Chittagong, which was destroyed by the same storm, with an iron screw-piled jetty, the ironwork for which is already in Calcutta. The timber revetment for the protection of the light-house on Kootubdea Island has been successfully completed, and the foreshore has been further defended by an abattis of trees.

Extensive repairs have been executed to some of the Nizamut buildings at Moorshedabad, but the work was not of a character to require further mention here.

Nizamut works.

The connection of the Public Works Department with the Zoological Gardens was considerably relaxed during the year. The heavier works had been completed,

Zoological Gardens.

and it was determined that the committee of the gardens could ordinarily carry out all that was necessary. These gardens have been most successful. A foul, insanitary native village has been replaced by a much appreciated place of public amusement and instruction.

The Hooghly Bridge has been maintained by the Bridge Commissioners in a very efficient state, and has experienced no serious accident during the year.

Hooghly Bridge.

The convenience and the importance of having communication for foot-passengers and vehicles between the banks of the Hooghly become more established year by year. The interruption of the communication would seriously affect the important traffic of the East Indian Railway, and would cause great inconvenience to the many passers between Calcutta and its suburb, Howrah.

The total outlay on district works amounted to Rs. 31,66,743, of which amount Rs. 74,977, or less than 2½ per cent., were expended by officers of the Public

District works.
Works Department.

The work carried out by District Road Cess Committees chiefly consisted of ordinary repairs to roads, and metalling and bridging the existing main lines of communication. The tendency which many committees showed, when the Act was first introduced, to commence and push on roads without proper inquiry or the preparation of needful plans and estimates, has been checked both by the steady pressure of Government and by the committees themselves having in some instances found that they have embarked in undertakings which they would not have commenced had the projects been properly considered in the first place.

Liberal provision has been made by some committees for the repair of village roads, but in many districts the grants for this purpose have been far too small. Measures have been taken to ensure that committees shall expend a fair proportion of their funds on village communications. Nothing tends so much to make the people appreciate the advantages derived from the road cess as the improvement of village roads; and the keen interest they have begun to take in such matters is shown by the numerous applications that are now made for small grants to carry out improvements in local communications.

The district road cess committees of 32 out of the 44 districts under this Government have now their own engineering staff complete, and the majority of the remaining districts have provided the subordinate establishment required for the supervision of their works.

The supervision of public works in Bengal is entrusted to five superintending engineers. One circle of superintendence consists exclusively of the works at the Presidency and on the Circular and Eastern Canals.

The other four circles comprise the whole of the remaining works in the province (imperial, provincial, and local). The assistance which four superintending engineers can give to the road committees of 44 districts, besides controlling the works, under the executive engineers, is not all that could be desired. The district engineers as a body are drawn from the junior officers of the department, from the Public Works subordinate establishment, and from engineers out of employment. As a rule, they lack the experience and the professional knowledge which executive engineers possess, and therefore require considerable help and guidance from superintending engineers.

It was stated last year that arrangements had been made to give to passed students of the Civil Engineering Department of the Presidency College a course of gratuitous practical instruction, with the view of training them for engineering appointments under district committees. The experiment has thus far worked well. The youths, after a short course of light work in the Government workshops, are sent to Akra for the brick-making season, where they mould bricks with their own hands and learn the details of brick manufacture. They then return to the shops and work at the lathes, the forge, and the bench. The usual course lasts

two years, but any student who has not been regular in attendance or obtained a sufficient knowledge of work is kept on until reported efficient. On completing their training in the workshops the young men are put under one of the executive engineers of the department and placed on out-door work to gain a knowledge of practical construction.

Several of those who have been pronounced qualified have already obtained suitable employment under district committees, and it is beginning to be understood that practical as well as theoretical qualifications are required of all candidates for employment on district works as well as in the regular Public Works Department.

Irrigation Works.

THE operations of the Irrigation Branch of the Public Works Department of Bengal comprise, in addition to works purely of irrigation and navigation, the maintenance of 2,800 miles of river embankments, on which a very considerable expenditure is incurred.

The total outlay under both these heads in 1877-78 was Rs. 35,93,674, against budget grants aggregating Rs. 38,50,000. The details of the grants and outlay are as follow :—

Heads.				Grants.	Outlay.
				Rs.	Rs.
Capital ...	{ Extraordinary (irrigation and navigation)...			27,00,000	23,74,352
	{ Ordinary (surveys)			20,000	34,617
Revenue (irrigation and navigation)				6,33,855	7,02,857
Ordinary agricultural works (<i>embankments</i>)				4,96,145	4,81,848
Total ordinary ...				11,50,000	12,19,322
Total extraordinary and ordinary ...				38,50,000	35,93,674

Distributed under the usual heads of service, the outlay is thus made up—

	Rs.
Works	17,30,163
Repairs	7,51,690
Establishment	10,46,985
Tools and plant	1,28,295
Profit and loss	110
Refunds of revenue	808
Suspense balances	—47,192
	<hr/>
	36,10,859
Less receipts on capital account	17,185
	<hr/>
Total ...	35,93,674

In addition to the above amount a sum of Rs. 52,117 was spent from contributions, making the total outlay from imperial funds and contributions amount to Rs. 36,42,780, of which Rs. 3,011 was spent

in England. Inclusive of tuccavee, the total outlay in the Irrigation Branch of the department during 1877-78 was as follows:—

	Rs.	Rs.
Irrigation and Navigation ... ..	.....	31,63,943
Embankments—		
Government	4,54,619	
Ditto tuccavee	3,36,429	
	<hr/>	7,91,048
Miscellaneous ... ..	.....	27,229
	<hr/>	
Total		39,82,220

The capital outlay on irrigation, Rs. 24,08,969, was considerably less than that of the previous year. This branch of the expenditure has for some years past exhibited a steady decline.

	Rs.
Its amount was in 1874-75	49,97,142
Ditto 1875-76	42,14,204
Ditto 1876-77	33,93,328
Ditto 1877-78	24,08,969

The expenditure on original works has in fact been reduced one-half in the last five years. This has been due quite as much to the rapid advance towards completion of all the great works on which the principal outlay has taken place as to any general reduction of public works expenditure rendered necessary by consideration of imperial finance.

For the last two years the budget allotments have not been fully spent. In 1877-78 the outlay on works fell short of the grant by no less than three lakhs. This was partly counterbalanced by an excess under maintenance, but there still remained a short outlay as compared with the budget grant of two and a half lakhs. The purely irrigation operations of this branch of the department are, in fact, rapidly contracting, few new schemes of any magnitude being brought forward to take the place of those approaching completion, so that it would seem that within a few years the outlay will consist chiefly of that on maintenance and revenue management. It is true that a very considerable extension of the existing distributary channels is contemplated in Orissa, and that an important scheme for a canal to connect the Hooghly with the Orissa rivers has been submitted for the sanction of the Government of India. A small scheme for improving the water-supply of the Hooghly district is also likely to be carried out. But still the increased expenditure which these schemes would involve would but partially supplement the falling off under the older and far larger schemes, and it would even seem that, as far as the wants of Bengal alone are concerned, it is already not difficult to foresee the limit to the further extension of irrigation.

It is to be regretted that the reduction of establishments has not kept pace with the contraction of expenditure on works. Although the principal administrative changes which have taken place during the year have been the abolition or amalgamation of circles or divisions, the establishments have been but slightly reduced, owing to the fact

that it has been necessary to retain such surplus officers and subordinates as were not wanted for famine relief works in Madras and Bombay, the Government of India having expressed its inability to provide for them elsewhere. A very considerable expenditure is thus incurred with absolutely no return whatever; and this is felt to be the more burdensome because it has to be met wholly from the funds raised by the special taxation which has been rendered necessary by the failure of the irrigation works to defray the charges for interest.

Independently, however, of the special enhancement due to the cause above mentioned, the percentage charge for establishments is very high, and would seem to indicate the necessity for more extensive changes than mere revision of existing scales within the irrigation branch itself. The subject is receiving attention, and some improvement has already been effected by the suppression of a division of the general branch in Orissa and the transfer of its works to the Irrigation Branch of the department. The changes already alluded to which were carried out with the same view during the year were—

- (1) The abolition of the Gunduk Circle and the transfer of its Divisions to the South-Western Circle.
- (2) The amalgamation of the Brahmince and Byturni Divisions and the Mahanuddy and Workshop Divisions in Orissa.
- (3) The abolition of four Survey Divisions, viz. the Northern Delta Survey, the Ganges Delta Canal Survey, and the Gunduk and Balsore Surveys, these surveys having been either completed or the projects abandoned.

The system of large contracts has as yet been but little tried in the Irrigation Department, and it is very possible that in its extension may be found an important means of reducing the large establishments which under the petty contract system almost universally in force are indispensable. Two large contracts, the only ones that have yet been given out, were brought to a close during the year under review. One was for the Pattamoondi Canal in Orissa, a large work, 40 miles in length; the other for the whole of the distributaries from the Patna Canal. In the first case the works were satisfactorily carried out as regards quality, but there was a failure in respect of time. In the second case the failure was complete, and it was found necessary to take the works out of the hands of the contractor before they were half finished, the result being a considerable loss to Government, both directly, from unnecessarily increased cost of work, and indirectly, in consequence of the distributaries not being ready for use in a season when there was a brisk demand for water. The result of this experiment is not favourable to the system of large contracts, but this is probably due mainly to defects in its application in this particular instance rather than to any inherent unsuitableness in the system itself; and it is still an open question whether much might not be done in this way to reduce the charges which, with a permanent establishment and an ever fluctuating expenditure, so largely enhance the cost of works.

The irrigation operations of the year, engineering and revenue, were comprised under three circles of superintendence—the Orissa, South-Western, and Sone Circles, and will now be described in that order.

The works under construction or maintenance in this circle include—

Orissa circle.
Two hundred and five miles of main canals, mostly finished;
Six hundred and forty-four miles of distributaries, ditto;
One thousand one hundred and fifteen miles of embankments maintained;

Five hundred and forty-eight miles of roads;
besides all the public buildings of Cuttack, Balasore, and Pooree districts, and the harbour works at False Point and Chandbally. Mr. Walker, M.I.C.E., is in charge of the circle.

The capital outlay on the sanctioned irrigation scheme was (exclusive of book charges for interest and other items)—

	Rs.
During the year 	4,66,128
Total to end of the year .	1,77,50,780
Against a sanctioned estimate of	1,93,12,557

The principal works under construction during the year were the Pattia (a branch of the Brahminee river) and Byturnee weirs, and the extension of the Kendrapara Canal to False Point.

The four great weirs across the Mahanuddy, Katjoorree, Beropa, and Brahminee are complete, and were maintained in efficient order. The Pattia and the two Byturnee weirs were nearly finished.

The extension of the Kendrapara Canal to False Point, though only 15 miles in length, has now been since three or four years in hand, and made but slight progress during 1877-78; the unhealthiness and jungly character of the country traversed by the last ten miles rendering it very difficult to procure and to retain labour. It is hoped that the whole canal to False Point may be opened for traffic by June 1879.

The sanctioned distributaries are mostly finished.

The year was one of heavy floods in the Mahanuddy and Brahminee, causing extensive damage to the embankments on the former river and its branches in Cuttack and Pooree. In the two districts there were altogether 39 breaches in the embankments, aggregating 12,076 feet, or about 2½ miles in length. All the tract provided with means of irrigation was efficiently protected, no breaches having occurred.

The outlay on maintenance amounted to Rs. 1,76,837, being at the rate of about Re. 1 per acre irrigable—a high charge, which will be reduced when the additional distributaries for which sanction has been requested are constructed.

The Lieutenant-Governor visited Orissa in the early part of 1878, and some important extensions of the sanctioned irrigation scheme were then resolved upon. It was found that the irrigable area, which is now estimated at 180,000 acres, might be doubled simply by the construction of distributaries from those portions of the existing canals for which no provision of this nature was made in the sanctioned

estimates, and that a still larger area might be brought under irrigation by similar means in combination with protective embankments. It appeared, indeed, that one cause of the small extent of irrigation hitherto had been the absence of means of distribution over the greater part of the large area commanded by the expensive main canals already constructed. The Superintending Engineer received instructions to prepare estimates for extending the distributaries under the Kondrapara Canal, and for furnishing the Pattamoondi Canal with similar works. The estimates have since been submitted to the Government of India and amount to about nine lakhs, for which sum it is calculated that another 100,000 acres may be brought under irrigation.

The extension of the tidal lines of water communication northwards towards the Hooghly and southwards towards the Chilka Lake also engaged attention, and a scheme, estimated approximately to cost 33 lakhs, was submitted to the Government of India for a canal to connect the existing tidal canal in Hidgellee with the Metai, an affluent of the Brahminee. A scheme for connecting the different estuaries and tidal creeks from the Metai southwards to within 20 miles of Pooree was sanctioned, the estimated cost being Rs. 1,50,000, and a commencement of the works, which consist simply of cuts connecting existing creeks, was made within the year, an appropriation from provincial funds having been made for the purpose. The Superintending Engineer has since submitted an outline of a scheme for continuing the navigation southwards to Pooree and the Chilka Lake, roughly estimated to cost about 12 lakhs. From the southern end of the Chilka Lake there is already canal communication with the town of Ganjam. The distance by this route from Gowkhally on the Hooghly, the head of the Hidgellee Canal, to Ganjam is 400 miles, and including the cost of that canal, 20 lakhs, and 55 lakhs for the Coast Canal and extensions above mentioned, it appears that this length of water communication, bringing the whole of southern Midnapore, Balasore, Cuttack, Pooree, and Ganjam into direct communication with Calcutta, might be made at an additional outlay of 55 lakhs, the average cost per mile being Rs. 18,000. The surveys necessary for completing this project have been ordered to be put in hand.

The year was remarkable for a great and unprecedented extension of irrigation in Orissa; 109,000 acres were irrigated, and of these 98,495 were assessed to water-rate under regular lease. Since the commencement of regular irrigation in 1872-73 the area had fluctuated between 12,000 and 20,000 acres, and only once rose as high as 30,000.

This great advance was due partly to the fact that the ryots, after five years' careful trial of irrigation, had fully satisfied themselves of its profitable character at the rates charged; partly to the operation of the new Irrigation Act, the provisions of which place such stringent checks on illicit irrigation that it is found cheaper to purchase water in the regular way than to steal it; and partly to a scant rainfall, the last being the most potent cause.

The rainfall of the year at Cuttack was 43 inches, against an average of 55 inches for 21 years, and probably of 60 inches for the delta generally.

A comparison with the average for each of the five most important months shows as follows:—

	Rainfall.	
	1877. Inches.	Average. Inches.
June	8.40	9.83
July	8.75	11.23
August	8.09	11.20
September	5.44	10.13
October	3.46	5.69
	34.14	48.08

These favourable conditions were skilfully taken advantage of by Mr. Wylly, the Deputy Revenue Superintendent, who, by relaxing the very stringent rules and dispensing with much of the cumbrous, but at first very necessary, procedure under which canal water had formerly been supplied, managed to give water to a very large area for which it was demanded in advance of the leases which were afterwards executed. So ably were the operations conducted, and so well was Mr. Wylly seconded by his subordinates and by the Engineer Department, that not only was the unprecedentedly large area above mentioned assessed to water-rate under regular lease, but 80 per cent. of the water-rates (due by rule only in January) were collected before the close of the year. The result is in the highest degree creditable to Mr. Wylly, as there can be no doubt that such a relaxation of the rules could only have been successful in the hands of a man who had acquired a thorough knowledge of the people and fully gained their confidence.

			Rs.
The khurreef demand was	...	...	1,52,132
Collections	...	...	1,22,862
Remissions	...	...	474
Remaining to be collected	...	...	28,796

It should be added that these results could not have been attained had not the canals and distributaries been in a high state of efficiency and the engineers active and skilful in the management of the distribution.

The rubbee crops in Orissa are of little importance, occupying probably not above 7 or 8 per cent. of the cultivated area. There was a slight falling off in the area irrigated, the total, including sugarcane, being 3,407 acres, against 4,312 in the previous year.

It is gratifying to add that the advances thus made in khurreef irrigation in 1877-78 have since been fully maintained, five-year leases being now executed for the whole area then irrigated.

The water-rate for khurreef rice was Re. 1-8, 50 per cent. more than it had previously been, which makes the sudden and permanent extensions of irrigation the more remarkable. This rate is now continued for five-year leases, the charge for an annual lease being double, or Rs. 3.

The revenue from navigation likewise shows an advance, the traffic in the canals having been stimulated by the great export of rice to the famine districts in the south. The receipts from tolls rose from

Rs. 22,881 in the previous year to Rs. 33,844, and the tonnage of goods carried from 77,367 tons valued at 32 lakhs, to 105,257 tons, valued at 53 lakhs.

The total revenue 'as credited in the accounts, compared with that of the previous year, the highest attained up to that time, was as follows :—

		1876-77.	1877-78.
		Rs.	Rs.
Water-rates	... ..	40,378	1,17,818
Navigation	... ..	22,881	33,844
Miscellaneous	... ..	11,298	9,445
Total	... ..	74,557	1,61,107

The working expenses for the year amounted to Rs. 2,16,072, viz.

		Rs.
Maintenance	... ..	1,76,837
Revenue management—		
Irrigation establishment	... ..	33,223
Navigation ditto	... ..	6,012
		<hr/>
		39,235
Total	... ..	<hr/>2,16,072 <hr/>

In spite, therefore, of the increased irrigation revenue, the receipts fell short of the expenses by Rs. 54,965.

No more favourable result can be expected until, by the improvement of the drainage and the extension of the distributaries, the whole of the large extent of country now commanded by the canals can actually be brought under irrigation.

The revenue from plantations is at present insignificant, but more attention was given to the subject during the year, and an annual grant of Rs. 10,000 from provincial funds was sanctioned for the extension of plantations. The cocoanut and one or two other valuable trees thrive well in the Orissa deltas, and may yet, if extensively planted along the canal banks, afford a not unimportant addition to the revenues.

Among minor items of interest it may be mentioned that some interesting experiments were made during the year to test the comparative outturn of irrigated and unirrigated crops: 700 distinct measurements made on crops under the Toldundah and Machgaon Canals gave the following results :—

		Maunds paddy.	Maunds straw.
Yield of irrigated rice	... ..	26.61	26.87
Ditto unirrigated „	... ..	10.72	12.08
		<hr/>	<hr/>
Balance in favour of irrigation	... ..	15.89	14.79

83 experiments by Mr. Campbell on the Kendrapara and High Level Canals showed a gain of only 6.25 maunds paddy and 7.18 maunds of straw. Mr. Walker thinks this great difference was perhaps attributable to the better supply of water given from the

Toldundah and Machgaon Canals, and expresses dissatisfaction with the distribution from the Kendrapara. At the rates prevailing in January last, viz. 40 seers paddy and 16 maunds straw per rupee, the money value of the increased yield due to irrigation would be Rs. 17 per acre in the one case and Rs. 6-12 in the other, out of which only Re. 1-8 had to be paid for water-rate. The season was very favourable to irrigation, and the high result obtained in the former case is very largely in excess of that found in former years of heavier rainfall.

A cadastral survey of the irrigable area has been sanctioned, and some progress was made with it during the year. It is likely to be an expensive operation, and its value now greatly lessened by the five-year lease system, which is coming into universal use.

South-Western circle. This circle comprises the following works :—

77 miles of canal.
265 „ of distributaries.
1,686 „ of embankments.

These works lie principally within the Midnapore, Hooghly, and Burdwan districts, but some are in Sarun, Chumparun, and Tirhoot.

The principal irrigation work is the Midnapore Canal, which, with two tidal reaches, has a length of 48 miles and irrigates effectively 60,000 acres, though its distributaries have been laid out for a very much larger area—

	Rs.
The amount of the sanctioned estimates for works, ²	
establishment, and tools and plant is ...	76,83,000
The capital outlay was in 1877-78 ...	2,16,887
Total to end of 1877-78 ...	70,51,773

The only new works of importance under construction during the year were two locks in the reach of the canal connecting the Damoodah with the Roopnarain. These were well advanced towards completion, and will probably be opened for traffic before the end of 1878.

The only outlay on the distributaries was that necessary for completing the works already begun, the area for which distributaries were originally sanctioned, 180,000 acres, being largely in excess of what can be effectively supplied, and the construction of these works is now limited to 140,000 acres.

The area irrigated was less than that of any previous year since 1872-73. In 1874-75 it rose to 72,318 acres, but the next two years being years of excessive rainfall, it fell successively to 55,995 and 32,681 acres. In 1877-78 it again fell to 19,819 acres, although the rainfall was somewhat scant, having been 47.79 inches, against an average of 55.19 for the preceding nine years. But the whole of the area irrigated was leased for five years at a rate of Re. 1-8 per acre, indicating a conviction on the part of the ryots, after all the disappointments of the two previous years, that taking one year with another the canal water is worth that price. This area has since risen in 1877-78 to 56,000 acres, all under five-year leases. It thus appears that within the area which the canal can effectively supply irrigation has taken as firm root in Midnapore as in Cuttack.

The collections amounted to Rs. 53,483, including the balances of previous years. Of this amount more than half was realized, by

compulsory process. The state of the collections in Midnapore has from the first been very unsatisfactory, the outstanding balances being always very heavy, and the actual realizations effected to a large extent only under compulsion; the reasons are not quite apparent, the Deputy Revenue Superintendent persistently reiterating his assertions of the extreme poverty of the people, though it is difficult to reconcile with this the fact of the great difficulty experienced in procuring labour for public works within the irrigated area. As regards 1877-78, the difficulty experienced in making the collections was the more inexplicable because irrigation was, according to the Deputy Revenue Superintendent's own showing, extremely profitable. The mean of a number of measurements of crops made by him shewed, in the cases of leases taken early in the season, a gain of 10 maunds of paddy per acre and 13 of straw, as compared with the yield of unirrigated fields; and in the cases of leases executed at a later date, a gain of 8 maunds and 8 maunds respectively. At the prices then ruling (the average, according to the Deputy Superintendent, being 1-8 per maund) the money gain from the paddy alone, not taking any account of the straw, must have been Rs. 15 and Rs. 12 per acre, the water rate being Re. 1-8. The question will be more fully investigated. The navigation revenue, despite an unfortunate breakdown in one of the locks, which prevented boats getting nearer than 8 miles to Midnapore for the greater part of the year, and the closure of one of the tidal reaches for two months for silt clearance, was far in excess of that of previous years, having reached the amount of Rs. 1,06,917, against Rs. 67,651 in 1876-77 and Rs. 51,810 in 1875-76. This was due to the great demand for rice for Madras and other southern ports. The measurement of tonnage of the boats passed through the canal was 360,968, and the actual probably 200,000 tons, valued at 171 lakhs. These amounts are 50 per cent. higher than those of any previous year. Mile for mile the tolls levied are heavy, but the canal connects three great rivers, and its different sections are merely links in much longer lines of untaxed navigation, so that the incidence of the tolls is much lighter than would at first appear. As regards the Midnapore district, there is ample evidence of the great value of the canal in raising the value of produce and landed property within a large tract of country.

The canal revenues for the year were as follows:—

				Rs.
Water-rates	...	...	...	53,483
Navigation	...	...	...	1,06,917
Miscellaneous	...	...	...	9,693
			Total	1,70,093

The working expenses were—

			Rs.	Rs.
Maintenance	...	...	1,80,457	
Revenue management	...	...	23,340	
Refunds of revenue	...	...	17	
				2,03,814
Deficit	...	...		33,721

Had it not been for the accident to the lock above mentioned, which necessitated a heavy outlay for reconstruction, the canal would this year have paid its working expenses.

This canal has been finished and in operation for three years.

Hidgellee Tidal Canal.

It is in two sections connecting the Hooghly with the Huldee and Russulpore rivers, its total length

being 28 miles.

It was maintained in efficient order during the year, the outlay being Rs. 30,564, inclusive of some heavy silt clearance.

The traffic was considerably in excess of that of any previous year, amounting to Rs. 1,58,433 measurement tons, or about 80,000 tons nett, valued at 31 lakhs. The great bulk of the tonnage is paddy and rice, and therefore of low value. There is no irrigation from this canal.

The receipts were—

	Rs.
Navigation tolls	60,971
Miscellaneous	1,309
	<hr/>
	62,280
Working expenses	30,564
	<hr/>
Surplus	31,716

The cost of the canal as given by the Controller is Rs. 23,00,000, but this includes at least 3 lakhs for interest after construction, besides other charges of an altogether exceptional nature, such as the bonus, Rs. 1,80,000, paid to the Irrigation Company at the time of the purchase.

Taking the cost at 18 lakhs, the surplus in 1877-78 would represent a return of nearly 2 per cent. upon the capital.

An important project was during the year submitted to the Government of India for extending this canal southwards along the coast to connect with Balasore and the Orissa navigation system. The cost is estimated at 35 lakhs. No line yet projected in Bengal is likely to be of such importance as to yield such returns. It will bring a vast increase of traffic into the present canal, and probably render it a fully remunerative work.

Sarun Irrigation Scheme.—Hooghly Water-supply Project.—These are two minor projects of exceptional interest, owing to their having been brought forward on the financial basis of a local guarantee of the interest on the capital outlay in the one case, and of local contributions to the capital cost in the other.

Irrigation surveys had been going on in North Behar since 1873-74. Several lakhs had been expended with the sole result that the several schemes proposed, great and small, were successively rejected by the Government of India. The district of Sarun had, however, of late years suffered from deficient rainfall, and though the evil effects were not apparent in any serious degree as far as the crops were concerned, the almost total failure of the water-supply in the different nullahs of the district had been specially felt both in the unhealthiness caused by the exhalation from the stagnant pools

in their beds, and in the difficulty experienced by the indigo-planters in procuring a sufficient supply of water for manufacturing purposes. The need of a better supply at last became so urgent that in 1873 a scheme was brought forward, and strongly supported by the planters, for making a cut from the Gunduk, about 50 miles above its mouth, by means of which water might be led into four or five of the principal nullahs of the district. These nullahs were formerly flood outlets of the Gunduk, and have had their beds and banks so much raised in many places by deposits from floods as to act only very partially as drainages. The indigo factories are all situated on their banks, and it was proposed that while a certain supply should be appropriated for manufacturing purposes, the remainder should be made available for irrigation, either by flow in the few places where that might be practicable, or by lift. No regulating work of any kind was proposed for the nullahs; nor, in fact, any interference of them whatever beyond sending a certain volume of water down them whenever the supply from the local rains might fail. A guarantee by the planters and zemindars was suggested, but the schemes made no real advance until the Lieutenant-Governor visited Chupra in the latter part of 1877, when, in an interview with the planters, several gentlemen pledged themselves to a fixed annual contribution. Meetings were subsequently held, when it was finally arranged that a scheme, to cost about six lakhs, should be carried out, a few of the planters and one or two zemindars agreeing to guarantee the interest at $4\frac{1}{2}$ per cent. on that amount, Government to be responsible for the cost of maintenance and to recoup itself by the sale of all surplus water for irrigation.

The project, which was at first submitted only in the rough, has since been more fully worked out. It has been found necessary somewhat to contract its scope, and its cost will probably not exceed five lakhs, for which sum it is expected that a volume of water can be thrown into several channels running through the south-eastern part of the district sufficient for the irrigation of some 60,000 acres of *khurreef* and 80,000 of *rubbee*, besides supplying the district with good water for drinking and all other domestic and manufacturing purposes. The rates to be charged for the water will be fixed from time to time by a joint committee of guarantors and Government officers. The guarantors will have priority of right to a supply, but will be entitled to no more than the quantity corresponding to the amount of the guarantee at the price charged per acre or per cubic foot. It is expected that the works will be completed in 1879; and if the people, after trial of the water, manifest a willingness to take it on a large scale and at a fair price, the scheme is capable of considerable development.

The scheme for the water-supply of Hooghly and the southern part of Burdwan is a modification of one brought forward some years ago, which failed to fulfil the conditions required by the Government of India in the case of all projects to be carried out from loan funds. In its present form it consists of a canal taken off from the Damoodah near Burdwan and carried down 18 miles to a point where it will fall into the Kana Nuddee, an old spill channel of the Damoodah. Cuts from the Kana Nuddee will lead the water into the Kana Damoodah

and Surrusuttée, and probably other water-courses, and the further distribution of the water will be left to the people themselves. All these channels act to a certain extent as drainages, but their efficiency in this respect has been greatly reduced by the elevation of their beds and banks by deposits to such a degree that they generally run upon ridges. So long as local drainage shall keep up a supply in them, no water will be admitted from the Damoodah, but whenever this may fail the artificial supply will come into operation. For eight months of the year the available supply from the river will be small, but will, after furnishing the district with plenty of good drinking-water—the crying want which first gave birth to the scheme—suffice for a considerable amount of *rubbee* irrigation. The scheme is strongly supported by local opinion, and already contributions have been promised towards its cost of about a lakh of rupees. This sum, it is expected, will be considerably increased, and it is also proposed to supplement it by a grant from provincial funds sufficient to cover the balance of cost. The estimate amounts to five lakhs. The benefits of the scheme in a sanitary point of view would alone amply justify this expenditure, as it will furnish an ample supply of good water to an immense number of villages situated on the banks of old water-courses which are still the haunts of the fever which has decimated the population, and whose stagnant pools are the only source of supply for all domestic purposes.

The drainage and reclamation of the great *bleecher* swamps in the southern part of Hooghly forms a distinct class of agricultural and sanitary improvements, which may yet develop into very considerable proportions. The works carried out in 1873-74 at the expense of the proprietors for the drainage of the Dhankuni swamps, lying along the Hooghly at the back of Serampore and Byddabatty, have been eminently successful, 13,000 acres having been either wholly reclaimed or greatly benefited by drainage at an expenditure which it is expected will be remunerative. The total cost is about Rs. 4,80,000, which sum is now in course of collection. Four new schemes for very much larger areas were brought forward during the year, and are now under consideration with a view to their execution under an Act which has yet to be framed for extending the provisions of the local Act under which the Dhankuni works were carried out to similar schemes in any part of Bengal. These schemes, together with that already in operation, will provide for the drainage of no less than 400,000 acres of land now more or less injured by inundation, a portion of which will be reclaimed from its present condition of total waste.

The expenditure on the embankments in the South-Western Circle is considerable, no less than 1,686 miles being maintained by Government, about half of this length at the cost of the zemindars, as tucavee works. The latter branch of the expenditure has yet to be brought under proper control, having been hitherto left far too much in the hands of the district officers, and having within the last three years assumed altogether undue proportions. The Government has noticed with dissatisfaction that in the Midnapore district the charges on this account have mounted up to sums absolutely ruinous to the zemindars. A committee has been appointed to report upon the

question, and meantime the outlay has been restricted to about the average of former years.

This circle comprises only the works of the Sone irrigation scheme. The outlay during the year was Rs. 16,91,323, and to end of the year Rs. 1,90,68,165, against a sanctioned estimate for works, establishment, and tools and plant of Rs. 2,73,63,503.

The expenditure on works alone was Rs. 12,43,601, of which Rs. 5,41,587 was on main canals, Rs. 4,77,539 on distributaries, and Rs. 1,81,507 on the cadastral survey of the irrigable area.

The heaviest outlay took place in the Buxar Canal, the whole of the earthwork of which was finished, and fair progress made with the masonry of the locks and falls.

The Patna Canal, 80 miles in length, was finished and opened for navigation in October 1877. The Arrah Canal continued open during the year only as far as the Ganges; but unfortunately, having no navigable connection with that river, the deep stream of which has for the last two years deserted the right bank and gone over to the left, there being but a shallow channel four miles in length with only one to two feet of water between it and the canal entrance during the dry months, the canal is now used simply as a feeder to the railway.

Considerable progress was made with the distributaries, as will be inferred from the expenditure above stated. Those sanctioned have for the most part been completed on the Arrah Canal, but still many additions and extensions are required. Much delay and some loss of revenue was caused by the failure of the contractor to complete a proper proportion of those under the Patna Canal. Altogether some 400,000 acres were furnished with this means of distribution. An immense extent of village channels is yet required, but the people show a willingness to make them for themselves, if only helped in the one point in which they fail—their inability to combine for any common object. Some good channels were constructed during the year, and a large number of others of a mere temporary nature to meet immediate requirements. In the large estate of Beheea, owned by Messrs. Mylne and Thomson, the whole of the village channels have been constructed in a thoroughly scientific manner, and furnish a model for the rest of the country. The great Doonraon estate has hitherto been very backward in the matter of village channels, but the Maharajah has lately received a loan of two lakhs from provincial funds for this purpose, which will enable him to do a good part of what is required.

The year was one of very scanty rainfall. The total during the months of June to September was as low as that of 1873-74. Nevertheless the people displayed a surprising unwillingness to resort to canal water for the rice crop until forced to do so. This failure of the rains was common to almost all Northern India, and prospects were at one time so dark that with a view simply to the production of more food it was determined, at a certain sacrifice of revenue, to reduce the water-rate for the *khurreef* crop from Rs. 2-8, at which it had previously been fixed, to Re 1, and to give water free in the Patna Canal, where regular assessments were impracticable, owing to the unfinished state of the distributaries. These measures led to a considerable demand

for water, which was well sustained in the *rubbee* season, and altogether 288,596 acres were brought under irrigation, viz. *khurreef* 149,894, *rubbee* 138,702, of which 64,090 under the Patna Canal were exempted from water-rate.

The irrigated *khurreef* rice proved a bumper crop, and the *rubbee* crops would have been as good had it not been for the ravages caused by caterpillars and other insects when the crop was approaching maturity. So extensive were the losses thus inflicted, that it was found necessary to remit a large part of the water-rates on all crops except wheat, barley, opium, and sugar-cane.

The revenue collections of the year fell far short of the demands, having amounted to Rs. 59,651, including arrears of former years, against assessments (according to the Superintending Engineer) amounting to Rs. 4,14,291, of which Rs. 1,50,000 were due within the year.

The principal cause of the short collections was the failure on the part of the engineer officers to furnish the Collectors with demand statements in proper time. This was due to several causes, but mainly to the inexperience of the establishment, this having been the first year of regular irrigation, the area irrigated large, and the establishment engaged in supplying a heavy demand for *rubbee* irrigation at the same time that the preparation of the *khurreef* accounts was going on. The Bhowli tenures introduced another great difficulty, the water-rates in such cases being payable by the zemindar and by the ryot in the proportion of their respective shares of the crop. In many cases the proprietors were numerous, and as each has to be furnished with a separate bill the multiplication of accounts was enormous.

The operations of the season, however, brought to light certain defects in the revenue system, for which some further experience will probably be required to devise the proper remedies. A committee consisting of the Collector, Superintending Engineer, and Executive Engineer, was appointed to report upon the subject.

With a view to encouraging the spread of irrigation and diminishing the labour of annual measurements and assessments, three-year leases were during the year, for the first time offered to the cultivators on the following terms :—

For *khurreef* irrigation the rate per acre is to be Re. 1-8, but no lease can be given for any area less than the whole irrigable area of the village.

For *rubbee* the rate is Rs. 2-4, and the area leased must be at least half the gross irrigable area.

For annual leases, whether *khurreef* or *rubbee*, the rate is Rs. 2-8.

The system was introduced too late in the year to become generally known, but has since been accepted by a few villagers to the extent of about 1,500 acres.

In Orissa no five-year lease is now given for anything less than the gross irrigable (which there corresponds closely with the gross cultivable) area of the village, and on these terms such leases are now readily taken up.

Navigation is gradually developing in the Sone Canals. Its progress would probably have been more rapid had there been permanent navigable connections between the Arrah Canal and the Ganges.

Eighty-seven miles of canal were open, and the receipts from tolls in 1877-78 were Rs. 26,774, against a budget estimate of Rs. 16,000. The tonnage of boats is set down at 82,000 tons, which is probably double the actual weight of goods carried, and the value at Rs. 12,80,000.

Plantations are being attended to, and some 15,000 trees of sorts have been planted out along the canals.

As in the case of Orissa and Midnapore, a special grant from provincial funds has been made for the above purpose.

The revenue account of the Sone Canals was as follows:—

Receipts—

					Rs.
Water-rates	...	...	...	...	59,651
Navigation	...	...	...	...	26,774
Miscellaneous	...	...	...	...	14,867
Total					1,01,292
Less refunds of revenue	...	...	...	...	750
Net revenue					1,00,542

Working Expenses—

Maintenance	...	...	...	...	2,10,828
Revenue management	...	...	...	...	40,829
Total					2,51,657
Deficit					1,51,115

A portion of the establishments here charged to maintenance is properly chargeable to revenue management, but it is not possible at present to determine the exact amount.

Had the comparison been made with the *assessments* for the year, the result would have been the reverse of the above, viz.—

					Rs.
Assessments	...	...	...	...	4,14,291
Working expenses	...	...	...	...	2,51,657
Surplus					1,62,634

Note on the Financial Position and Prospects of the Bengal Canals.

THE amounts of the sanctioned estimates for the irrigation projects, either finished or under execution, inclusive of the usual book charges for capitalization of land revenue, pensions, and interest, are as follow:—

					Rs.
Orissa	...	...	...	...	2,53,35,073
Midnapore Canal	...	...	...	...	96,84,000
Tidal Canal	...	...	...	...	21,35,152
Sone Canals	...	...	...	...	3,17,30,337
Total					6,88,84,562

Of these estimates, the portions for works, establishments, and tools and plant, which is that on which interest is charged, and the actual outlay to end of 1877-78, are shown below:—

	Estimated cost of works, establish- ments, and tools and plant.	Actual outlay to end of 1877-78.
	Rs.	Rs.
Orissa	1,93,12,557	1,77,80,902
Midnapore Canal	76,83,500	70,51,773
Tidal Canal... ..	17,75,032	17,83,905
Sone Canals	2,73,63,503	1,90,85,040

The amounts in the second column are those at which interest will be charged for 1877-78, the total charge for that year being the amount thus obtained plus interest on half the outlay in the year. This, added to the deficit on working, if any, will represent the total charge for which the local Government will be responsible.

Calculated in this manner, the corresponding charge to local revenues for the year 1877-78 was as follows:—

	Rs.
Orissa project	8,45,515
Midnapore and Tidal Canals	3,95,507
Sone Canals	9,70,333
Total	<u>22,11,355</u>

This Government is, however, also debited with the interest on the following projects, for which, in the two first cases, no possible return can be received, viz.—

	Outlay. Rs.
Tirhoot surveys	5,31,907
Raneegunge Canal (an abandoned project)	1,59,502
Hooghly water-supply	1,42,959

The interest charges made good by this Government upon these three projects amounted to Rs. 36,443 in 1877-78, making the total charge to the provincial revenues Rs. 22,47,798.

If 1878-79 proves a favourable year for irrigation, it is estimated that the corresponding charge for that year will be reduced to Rs. 20,00,000.

It will be apparent, from what has already been said with reference to the operations of the past year, that the directions in which a reduction of these charges upon the local revenues is mainly to be sought are—

- (1) the extension of the area irrigable by the construction of the distributaries necessary to bring the whole of the lands now commanded by the main canals within reach of irrigation;
- (2) the reduction of working expenses, to whatever extent that may be practicable;
- (3) the extension of the means of cheap transport between the irrigated districts and the best markets, so as to raise the local value of produce, and consequently the water-rate which may be charged.

Judging from present appearances, there is little prospect that any one of the three great schemes can pay directly the interest on the capital outlay within at least another generation, if then. At the same time there can be no doubt that the indirect value of the canals to the country must be largely in excess of the charges they involve. In 1877-78, 400,000 acres were irrigated, and, taking the yield at an average of 20 maunds worth Re. 1 each, the total value of the crops raised could not have been less than 80 lakhs, half of which at least was due to irrigation; and if 1877-78 was an exceptionally favourable year for irrigation, still it is apparent that, even with the very restricted area now irrigable, the returns in average years must be in excess of the deficits now met from the proceeds of the public works cess.

Railways.

GUARANTEED RAILWAYS.

THE East Indian Railway runs through other provinces besides Bengal, but as its head offices are in Calcutta it is usual in this chapter to give an account of the working of the line as a whole.

The length of the main line of this railway on which rates and fares are calculated is 1,279·58 miles, of which 410·58 are double. The total length of single track, with sidings, is 1,975·39 miles. The total capital expenditure at the end of 1877 was Rs. 28,72,85,294, which gives an expenditure per mile of Rs. 2,24,515·3 upon the paying length (1,279·58 miles) of the line and Rs. 1,45,432·2 upon the total length (1,975·39 miles). During the year—

	Rs.
The capital expenditure amounted to ...	11,80,011
„ credits to capital „ ...	2,07,419
Balance to capital expenditure	<u>9,72,562</u>

During the year the branch line from Barh station to the Ganges in connection with through-booking to the Tirhoot Stato Railway was opened. This was made by the Government Engineers of the Tirhoot Stato Railway, but is worked by the East Indian Railway Company.

In addition to the capital expenditure, a sum of Rs. 8,095 was spent upon minor works of construction at the cost of revenue.

There were no engineering operations of sufficient importance to deserve mention, except the new scheme for remodelling the Howrah Terminal Goods-yard, which was commenced, and is now well in hand.

Much progress has been made in improving the standard of Maintenance, but this was somewhat retarded by the supply of sleepers being inadequate to the demand. Arrangements have, however, now been made which it is hoped will meet the demands for sleepers for the two years.

The engines have been maintained in good order; the average daily train-mileage run by the engines was in—

	1st half.	2nd half.
1876 ...	42	42·5
1877 ...	61	58·2
Difference	<u>+19</u>	<u>+15·7</u>

The consumption of coal in pounds per train mile was—

	ENGINES.	
	Passenger.	Goods.
In 1876 ...	40·29	45·175
„ 1877 ...	43·47	49·865

The good results of granting premia to drivers for economy in fuel are seen from the following figures. The average consumption of fuel per engine mile was 50·62lb. Before the premium system the consumption was 64·7. This shows a saving of 14·1lb per mile; or a total saving of 63,912½ tons, which at Rs. 2·8 per ton amounts to Rs. 1,59,781. The total premium paid during the year amounted to Rs. 1,642.

During the year one passenger and three goods engines were condemned.

The employment of natives as drivers and shunters continues to be extended. When a native driver is employed, a European guard is attached to the train.

The cost of engine-men, firemen, and all labour connected with running the engines was—

			Rs.	Engine miles.
In 1876	...	...	9,58,132	6,654,836
„ 1877	...	...	10,62,869	8,119,042
			<u>+1,04,737</u>	<u>+1,464,206</u>

The Kurhurballie and Serampore collieries yielded—

				Tons.
In 1876	...	...	...	238,818
„ 1877	...	...	...	308,500
			Increase in 1877 was	<u>69,682</u>

The whole of the rolling-stock has been upheld in a satisfactory manner. The working expenses (repairs and oiling) per train mile amounted to—

				As.
In 1876	...	...	...	2·81
„ 1877	...	...	...	<u>2·37</u>
			Decrease	<u>0·44</u>

The vehicles renewed and repaired—

			Rs.
In 1876	were 314 in number at a cost of	...	2,90,245
„ 1877	„ 340 „ „ „	...	<u>3,16,909</u>

During the year 61 vehicles have been fitted with the larger axles, so as to increase the load of the wagons from 6 to 10 tons. The total number of vehicles thus fitted is now 4,251, while the total number of vehicles running on the main line is 6,667. None of the 1,000 iron-covered goods wagons indented for from England have arrived, but some wheels and other parts have been received.

The lines of telegraph have been efficiently upheld. Since the 1st April the telegraph has been maintained by the Government Telegraph Department, and arrangements have been agreed to for the work being performed on a schedule of rates.

The following are the two most serious accidents to rolling-stock that have occurred during the year. On the 7th February, at Kurhurballie, a down goods-train parted, and the rear portion ran back into some wagons which were standing at Kurhurballie. Two coke wagons were smashed, and the following vehicles were damaged, viz. one brake-van, 19 coal-hoppers, six low-sided wagons, two covered goods wagons, and six coke wagons. The damage was estimated at Rs. 3,629.

On 20th March, at Mugra, a down goods-train ran into another goods-train which was shunting. Two wagons were smashed, and one engine, one tender, and five wagons, were damaged. The damage was assessed at Rs. 3,316. There were 11 cases of broken axles and journals. The accidents to life and limb during the year are shown below:—

		Killed.	Injured.
Passengers	...	4	21
Railway servants	...	23	63
Trespassers and miscellaneous	...	58	19

The above includes 13 suicides.

Earnings and expenditure.	Exclusive of the flotilla—	Rs.
The total earnings amounted to		3,96,57,241
„ expenditure „		1,23,07,439
Balance		2,73,49,802

Details are given in the table below:—

Abstract of Earnings, Expenses, and Profits.

	1874.	1875.	1876.	1877.
Average miles open (a) ...	1,279½	1,279½	1,279.58	1,279.58
Train miles (Traffic Department) (b) ...	7,330,668	6,511,574	6,512,733	7,871,081
	Rs. *	Rs.	Rs.	Rs.
Earnings (c) ...	3,46,05,103	2,72,89,251	3,27,69,142	3,96,57,241
Expenses (d) ...	1,21,75,908	1,01,29,298	1,11,25,137	1,23,07,439
Profits ...	2,24,29,195	1,68,59,953	2,16,44,005	2,73,49,802
Average per mile open. { Earnings... ..	27,010	21,324	25,009	30,992.4
Expenses	9,514	8,150	8,694	9,618.3
Profits	17,526	13,174	16,915	21,374.1
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Average per Train { Earnings	4 11 6	4 15 4	5 0 6	5 0 7
mile. { Expenses	1 10. 7	1 14 4	1 11 4	1 9 0
Profits	3 0 11	3 1 0	3 5 2	3 7 7
Percentage of working expenses on earnings	35.2	38.2	33.9	31.0
Percentage of profits on capital expended (e)	7.9	5.9	7.6	9.5
	Rs.	Rs.	Rs.	Rs.
Capital on which guarantee is paid, or total capital paid up (f)	30,06,44,400	28,72,26,153	29,63,12,171	30,04,90,887
Rate per cent. of profits on capital paid up ...	7.5	5.8	7.3	9.1

N.B.—Steamer traffic has been excluded from this table, except in the two columns giving percentage of profits on capital expended and capital paid.

(a) Table 13 of Revenue Account.

(b) " 14 of " "

(c) " 18 of " "

(d) Table 8 of Revenue Account.

(e) " column 20 of Review of Revenue Account.

(f) " " 18 of " of " "

Columns 13 and 14 of the above table show the good results obtained this year in economic working.

	Rs.
The earnings from coaching traffic amounted to	96,73,621
Ditto from goods traffic	2,88,72,566
The percentage upon the total earnings	3,97,02,792
Of coaching traffic is	24.1
Goods traffic is	71.5

Details are given in the following table:—

Details of Passenger Traffic.

(Abstract H of Revenue Account.)

DESCRIPTION OF CLASSES.	NUMBER CON- VEYED.		Increase in 1877.	Decrease in 1877.	Increase per cent.	Decrease per cent.	Average mileage in 1877.	RECEIPTS.		Increase in 1877.	Decrease in 1877.	Increase per cent.	Decrease per cent.
	1876.	1877.						1876.	1877.				
1st class	48,400	45,086	.....	2,484	.....	5.03	130.9	Rs. 5,02,856	Rs. 4,91,922	.....	Rs. 77,894	.....	13.67
Percentage on entire passenger traffic	0.72	0.82	.....	.....	.....	.....	.....	7.00	5.70	.....	.....	.....	.....
2nd class	129,544	123,055	.....	1,459	.....	1.13	140.9	5,12,917	5,15,686	2,779	.....	0.54	.....
Percentage on entire passenger traffic	1.93	1.72	.....	.....	.....	.....	.....	6.30	5.97	.....	.....	.....	.....
Intermediate class	308,950	500,316	51,356	.....	10.09	.....	39.2	4,36,020	4,68,170	.....	15,750	.....	3.55
Percentage on entire passenger traffic	7.57	7.55	.....	.....	.....	.....	.....	5.99	5.42	.....	.....	.....	.....
3rd class	6,031,492	6,087,025	653,560	.....	10.83	.....	68.6	65,06,145	71,57,255	5,91,140	.....	9.00	.....
Percentage on entire passenger traffic	89.78	90.11	.....	.....	.....	.....	.....	80.71	82.01	.....	.....	.....	.....
Total	6,721,306	7,422,069	700,763	.....	10.43	.....	68.2	81,35,808	86,33,053	4,97,275	.....	6.11	.....
Percentage of passenger traffic to entire goods and coaching traffic	.....	.....	.....	.....	.....	.....	.....	24.75	22.40	.....	.....	.....	.....

The following table gives an abstract of the dealings of the Howrah terminus with other stations:—

Abstract of Goods forwarded from, and received at, Howrah and Calcutta Stations during the years 1876 and 1877.

(Statement No. 3 submitted by the Agent half-yearly.)

NAME OF ARTICLE.	RECEIVED AT HOWRAH AND CALCUTTA.		Increase in 1877.	Decrease in 1877.	FORWARDED FROM HOWRAH TO CALCUTTA.		Increase in 1877.	Decrease in 1877.
	1876.	1877.			1876.	1877.		
	Tons.	Tons.			Tons.	Tons.		
Beer, spirits, and wine	79	78	.....	1	11,468	12,328	860	.....
Coal	274,388	308,472	34,084	.....	61	94	33	.....
Copper	8	40	32	.....	2,282	2,872	590	.....
Cotton	12,757	13,859	1,102	.....	2,925	3,560	635	.....
Ghee and oil	5,253	5,049	306	.....	707	1,854	1,147	.....
Grains	252,844	386,435	133,591	.....	754	3,471	2,717	.....
Gunny	721	513	.....	208	12,023	21,074	9,051	.....
Hides and horns	13,742	19,188	5,446	.....	69	20	.....	30
Indigo	4,001	4,806	805	.....	15	4	.....	11
Iron	587	396	.....	171	17,621	22,820	5,199	.....
Lac-dye	3,680	5,835	1,168	.....	3,940	28	.....	3,912
Lime	6,202	6,200	97	.....	96	4	.....	50
Opium	7,345	9,396	1,991	.....	9	1	.....	5
Piece-goods	332	339	7	.....	37,337	39,488	2,151	.....
Salt	.....	.....	.....	.....	69,721	73,733	4,012	.....
Salt-petre	20,794	16,380	.....	4,414	8	21	.....	13
Seeds	150,508	220,027	64,119	.....	447	113	.....	134
Stones	1,400	1,551	151	.....	73	129	56	.....
Sugar	11,074	12,529	1,455	.....	282	221	.....	61
Miscellaneous, excluding railway materials	39,096	40,170	1,074	.....	38,318	44,993	6,675	.....
Total	810,780	1,052,602	241,722	.....	198,146	227,092	28,946	.....

The gross revenue expenditure exceeds that of 1876 by Rs. 12,14,043, of which the sum of Rs. 8,59,220 Working expenses. was due to special and miscellaneous expenses.

Abstract of Working Expenses during the years 1876 and 1877.

(No. 8 of Revenue Account.)

HEADS OF CHARGE.	EXPENSES		Increase in 1877.	Decrease in 1877.
	1876.	1877.		
	Rs.	Rs.	Rs.	Rs.
Maintenance	31,26,032	30,10,432	.....	1,15,600
Locomotive	26,94,287	29,00,332	2,06,045	.....
Carriage and Wagon	11,46,280	11,81,300	35,020	.....
Traffic	21,05,571	26,11,746	2,06,175	.....
General charges	13,98,978	13,90,422	.....	8,550
Steam-boat	55,980	87,719	31,739	.....
Special and miscellaneous	3,53,987	12,13,207	8,59,220	.....
Total	1,11,81,115	1,23,95,153	12,14,043	.....

Details of steamer traffic are given below :—

Steamer Traffic.

(No. 8 of Revenue Account.)

YEARS.	Earnings.	Expenses.	Deficit.	Profit.
	Rs.	Rs.	Rs.	Rs.
1872	1,30,567	91,527	.....	48,040
1873	1,42,805	80,604	.....	62,201
1874	1,69,216	1,04,726	.....	64,490
1875	88,919	76,758	.....	12,161
1876	69,228	55,978	.....	13,250
1877	45,550	87,719	42,169	.....

The foreign traffic was—

	Mds.	Rs.	Number of passengers.	Rs.
In 1876*	1,16,48,934	53,19,924	312,031½	13,59,673
„ 1877*	2,20,69,352	88,57,818	401,276½	15,08,550
Increase	1,04,20,418	35,37,894	89,245	1,48,897

The length of line on which rates and fares are calculated is 223·57 miles. The whole is single line. The length with sidings is 245·65 miles. The capital expenditure at the end of the year was Rs. 3,69,18,150, which gives an expenditure per mile of Rs. 1,65,103·1 upon the paying length (223·57 miles); Rs. 1,50,287·6 upon the total length (245·65 miles). During the year—

	Rs.
The capital expenditure amounted to	1,21,533
„ credits to capital	13,964
Balance to capital expenditure	1,07,569

The expenditure on new minor works was Rs. 432, paid for by revenue.

The engineering works were of little importance. Some additional sidings have been put in, and a few minor works at stations completed. The outlay involved is—

Capital.	Revenue.	Total.
Rs.	Rs.	Rs.
94,390	432	94,822

* Taken from report on earnings by the Chief Auditor. Statement of goods traffic subdivided under the heads of local and foreign earnings; summary of coaching traffic subdivided under the heads of local and foreign earnings.

Maintenance.

The cost of maintenance—

		1876. Rs.	1877. Rs.
Per mile per month was	...	330	379
Number of sleepers renewed	...	36,411	35,376
Miles of rails renewed	...	0·77	2·99

Locomotive Department.
the engines was—

The engines have been maintained in good order. The average daily train mileage run by

		1st half.	2nd half.
In 1876	...	44·0	43·5
„ 1877	...	76·1	70·4
Increase	...	32·1	26·9

Consumption of coal.

The consumption of coal in pounds per train mile was—

			ENGINES.	
			Passengers.	Goods.
In 1876	...	...	36·69	43·24
" 1877	...	...	34·98	47·68

The rolling-stock is being upheld in a satisfactory manner. The working expenses (repairs and oiling) per train-mile amounted to—

	As.	
3·5	...	In 1876.
2·4	...	„ 1877.

The cost of repairs used to be charged at a mileage rate, but since July the actual cost has been debited monthly to the Jubbulpore line.

During the year 392 vehicles have been fitted with larger axles, so as to increase the load of the wagons from 6 to 10 tons. The total number of vehicles now fitted with these new axles is 651, while the total number of vehicles running on the Jubbulpore line is 1,016.

The dismantling of the railway telegraph wires was completed during the year. The three wires leased from Government rendered these unnecessary, and most of the dismantled wire has been used up for fencing.

Telegraph.

There were no accidents to rolling-stock worth mentioning. Of accidents to life and limb there were fifteen, of which seven caused death. Of the latter, two were suicides and two were railway servants. Of those injured only six were railway servants. The accidents to passengers consisted of one killed.

Accidents.

		Rs.
Earnings and expenditure.	The total expenses amounted to	17,32,697
	„ earnings	46,48,967
	Balance	29,16,270

which gives, upon the total capital guaranteed, a percentage of 8·3.

Abstract of Earnings, Expenses, and Profits.

YEARS.	Average miles open.		Train miles (Revenue Department).		Earnings.	Expenses.	Profits.	PER MILE OPEN.			PER TRAIN MILE.			Percentage of working ex- penses on earnings.	Percentage of profits on capital expend- ed.	Capital on which guarantee is paid, total capital paid up.	Rate per cent. of profits on total capital.
	a	b	c	d				Earnings.	Expenses.	Profits.	Earnings.	Expenses.	Profits.				
	No.	No.	Rs.	Rs.	Rs.				Rs. A. P.	Rs. A. P.	Rs. A. P.				Rs.		
1874 ...	2375	573,735	25,64,041	10,91,735	14,72,306	11,429	4879	6,580	4 6 9	1 14 2	2 8 7	223	40	3,32,04,160	23	24	
1875 ...	2375	445,714	20,18,725	11,70,540	8,47,885	9,022	5,233	3,759	4 8 5	2 10 0	1 14 5	579	23	3,33,48,334	23	24	
1876 ..	2375	501,398	26,74,370	12,00,503	13,65,003	11,901	5,856	6,165	4 8 4	2 3 5	2 4 11	490	37	3,48,76,327	37	39	
1877 ...	2375	690,501	49,48,967	17,32,637	22,16,370	20,794	7,750	18,044	4 11 10	1 12 3	2 15 7	373	79	3,53,48,335	79	83	

a Table 13 of Revenue Account.

b " 14 " "

c and d " 8 " "

e Table A, column 20, Review of Revenue Account.

f " A, " 18, " "

The great improvement in the economic working of the Jubulpore line is sufficiently apparent from the figures in columns 13 and 14 of the above table.

The total earnings from coaching traffic amounted to	Rs. 10,81,228
Ditto goods ditto	29,61,635
The percentage upon the total earnings ...	46,48,967
Of passenger earnings is	23.3
Goods earnings is	63.7

Details are given in the following table :—

Details of Passenger Traffic.

(Abstract H of Revenue Account.)

DESCRIPTION OF CLASSES.	NUMBER CONVEYED.		Increase.	Decrease.	Increase per cent.	Decrease per cent.	RECEIPTS.		Increase.	Decrease.	Increase per cent.	Decrease per cent.
	1876.	1877.					1876.	1877.				
1st class	5,448	5,447	.....	1	..	0.02	Rs. 91,447	Rs. 87,643	.....	3,604	..	3.83
Percentage of entire passenger traffic	1.70	1.54	.....	..	..	..	10.98	9.94	.....	.....	..	1.09
2nd class	21,475	23,437	1,962	..	9.15	..	1,11,350	1,13,106	.....	1,244	..	..
Percentage of entire passenger traffic	7.04	6.62	.....	..	..	..	18.74	19.78	.....	22,220	..	47.55
Intermediate class	9,632	5,474	.....	4,158	..	43.30	46,729	24,590	.....	.....	..	..
Percentage of entire passenger traffic	3.17	1.55	.....	..	19.11	..	5.61	2.77	.....	.....	13.70	.....
3rd class	295,238	319,493	61,255	..	..	..	5,79,980	6,59,453	79,478	.....	.....	..
Percentage of entire passenger traffic	89.06	90.29	.....	..	..	..	69.67	74.51	.....	.....	..	..
Total	304,513	355,851	49,098	..	16.09	..	8,82,506	8,52,016	52,510	.....	6.31	.....
Percentage of passenger traffic to entire coaching and goods traffic	.....	.....	.....	..	..	..	34.70	21.89	.....	.....	..	..

The average load in tons of each goods-train was	1876. 85.22	1877. 110.30
" " " wagon "	3.675	4.344

The details of goods traffic are given in the following table :—

Details of Goods Traffic.

(Abstract I of Revenue Account.)

	WEIGHT CARRIED.		Increase in 1877.	Decrease in 1877.	RECEIPTS.		Increase in 1877.	Decrease in 1877.
	1876.	1877.			1876.	1877.		
<i>Merchandise.</i>	Tons.	Tons.	Tons.	Tons.	Rs.	Rs.	Rs.	Rs.
For the public ...	203,142	412,622	209,480	.....	13,63,735	23,27,384	14,63,649	.....
„ railway ma- terials.	3	857	854	.....	16	4,325	4,309	.....
<i>Minerals.</i>								
For the public ...	6,424	24,672	18,348	.....	35,423	1,24,672	93,149	.....
„ railway con- struction.	.....	.....	.....	.....	.....	.....	.....	.....
Livestock ...	.....	.....	.....	.....	93	13	.....	80
Rent, demurrage, &c.	.....	.....	.....	.....	744	1,342	598	.....
Total ...	209,569	438,151	228,582	.....	14,00,011	29,61,636	15,61,625	.....
Percentage of goods traffic to entire goods and coach- ing traffic.	.....	.....	.....	.....	68.35	73.25	.....	.....

The following table gives an abstract of the dealings of the terminus Jubbulpore Station with other stations during the years 1876 and 1877 :—

Abstract of Goods forwarded from, and received at, Jubbulpore Station during the years 1876 and 1877.

(Statement No. 3 half-yearly submitted by the Agent.)

NAMES OF ARTICLES.	FORWARDED FROM JUBBULPORE.		Increase in 1877.	Decrease in 1877.	RECEIVED AT JUB- BULPORE.		Increase in 1877.	Decrease in 1877.
	1876.	1877.			1876.	1877.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Beer, spirit, and wine.	490	1	.....	489	.....	364	364	.....
Coal	5,651	.....	.....	5,651	.....	25,053	25,053	.....
Cotton	95	345	250	.....	457	139	.....	319
Grains	1,168	10,723	9,555	.....	314	2,674	2,330	.....
Lac	184	1,156	972	.....	971	314	.....	657
Piece-goods ...	376	43	.....	333	23	399	376	.....
Salt	62	48	.....	4	150	52	.....	98
Seeds	194	277	83	.....	15	527	512	.....
Sugar and jagri ...	3,669	78	.....	3,651	7	1,260	1,253	.....
Miscellaneous, ex- clusive of railway materials.	4,262	1,237	.....	3,025	1,363	6,031	5,568	.....
Total ...	1,141	13,848	.....	2,293	3,330	37,612	34,282	.....

Abstract of Working Expenses during the years 1876 and 1877.

(No. 8 of Revenue Account.)

HEAD OF CHARGES.	EXPENSES.		Increase in 1877.	Decrease in 1877.
	1876.	1877.		
	Rs.	Rs.	£s.	Rs.
Maintenance	4,33,874	5,09,308	75,434	.....
Locomotive	8,35,823	4,92,724	1,56,901	.....
Carriage and Wagon	1,28,702	1,42,480	13,778	.....
Traffic	1,43,821	1,76,865	33,044	.....
General charges	1,36,258	1,33,983	.....	2,255
Special and miscellaneous	1,31,049	2,77,336	1,46,287	.....
Total	13,09,507	17,32,696	4,23,189	.....

The foreign traffic was—

	Mds.	Rs.	Number of passengers.	Rs.
In 1876*	55,07,381	13,78,711	151,051	7,53,418
„ 1877*	1,17,17,546	29,39,373	162,638	8,00,503
Increase	62,10,165	15,60,662	11,587	47,055

The length of this line on which rates and fares are charged is 158·89 miles of single road, the total length, including sidings, being 198·78 miles. The length of sidings has been somewhat increased during the year, owing to the construction of a siding at Pangsā down to the river, and to the extension, in a similar manner, of the sidings at Goalundo. The total capital expenditure up to the 31st December 1877 was Rs. 3,21,03,753,* which gives an expenditure per mile of Rs. 2,02,050 upon the paying length (158·89 miles), Rs. 1,61,504 upon the total length of the line (198·78 miles), during the year.

* Excluding steam-boat expenditure, Rs. 9,21,120.

	Rs.
The capital expenditure during the year amounted to ...	1,24,134
The credits to capital	93,362
Balance to capital expenditure	30,772

In addition to this capital expenditure there was an expenditure of Rs. 3,666 upon “Now minor works” paid for by revenue.

During the year the river-side terminus at Goalundo was shifted higher up the river, as the first site had silted up; this necessitated the shifting of the sidings.

* Taken from Report on Earnings by the Chief Auditor.

A branch line was also constructed from Pangsa station to the river Chundna.

The way and works have been efficiently maintained. The

Maintenance.

renewals of wooden sleepers amounted to 18,780, besides 297·5 pairs of bowl sleepers. The quantity of ballast put in was 226,053 cubic feet. The number of lineal feet of rails renewed was 8,753 feet. Thorough repairs were executed to the terminal buildings at Sealdah. The Gornai bank and others, which suffered from slips during the heavy rains in August, have been made up and turfed.

The engines have been maintained in good order. The average

Locomotive Department. daily mileage run by the engines was—

			1st half.	2nd half.
In 1876	...	...	49·5	41·9
„ 1877	...	...	46·2	74·2
		Decrease	3·3	Increase ... 29·3

The consumption of coal in pounds per train mile was for the half-years—

			1876.	1877.	Difference.
Ending June	...	...	53·95	51·62	0·69
„ December	...	...	53·63	51·39	0·76

The train miles were—

				Passengers.	Goods.
In 1876	...	...	...	279,661	261,392
„ 1877	...	...	...	300,582	310,108
		Difference	...	20,921	79,016

Carriage and Wagon Department.

There have been built and turned out during the year—

Two 1st-class sleeping carriages (reconstructed).

Nine 3rd-class carriages (converted from high-sided coal and cattle trucks).

Ten iron rectangular wagons have been rebuilt at the cost of the Fire Insurance Fund to take the place of those destroyed by fire.

Fifty-nine more vehicles have been fitted with oil axle-boxes.

In anticipation of the opening of the Northern Bengal State Railway, indents have been sanctioned for—

- 25 additional 3rd or 4th-class carriages.
- 5 „ „ brake-vans,
- 150 iron-covered goods wagons,
- iron under-frames for 20 3rd or 4th-class carriages.

Proposals were under consideration at the close of the year for five additional locomotives and 75 additional iron-covered goods wagons.

The negotiations for the transfer to Government of the Company's telegraph are in abeyance, pending a reference to the Board of Directors, to which no reply

Telegraph.

has as yet been received.

There was only one serious accident during the year. On the morning of the 30th May the down mixed train, which carried the mails, while shunting at Kanchrapara, was run into by a heavy goods, and five wagons and a brake-van were wrecked. There was no injury to life or limb, but the driver of the goods was brought to trial and fined Rs. 50 for running at improper speed.

At the end of the year the junction arrangements at Chitpore between the Eastern Bengal Railway and the Port Trust Tramway were nearly completed, and the scheme for conveying the Strand Bank Tramway across the river frontage of the railway was in progress.

Earnings and expenditure. Exclusive of the flotilla—

		Rs.
The total earnings amounted to	...	43,56,003
„ expenditure amounted to	...	17,17,557
Balance	...	26,38,446

Details are given below:—

Abstract of Earnings, Expenses, and Profits.

	1874.	1875.	1876.	1877.
	No.	No.	No.	No.
Miles open	158½	158	158½	158·89
Train miles (Traffic Department)	550,681	518,980	551,244	656,704
	Rs.	Rs.	Rs.	Rs.
Earnings	35,64,841	29,34,328	33,01,377	43,56,003
Expenses	18,60,141	18,23,908	11,41,280	17,17,557
Profits	17,04,700	11,10,420	18,60,091	26,38,446
Per mile open	22,526	18,572	20,862	27,415
{ Earnings	11,754	11,548	9,108	10,809
{ Expenses	10,772	7,028	11,754	16,606
{ Profits				
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Per train mile	6 7 7	5 10 6	5 15 10	6 10 1
{ Earnings	3 6 1	3 8 3	2 9 10	2 9 10
{ Expenses	3 1 6	2 2 3	3 6 0	4 0 3
{ Profits				
Per cent. of working expenses on earnings	50·4	62·2	43·7	39·4
Per cent. of profits on total capital expended	5·6	3·5	5·9	8·6
	Rs.	Rs.	Rs.	Rs.
Capital on which guarantee is paid	2,92,15,767	2,92,67,585	3,37,37,040	3,37,37,040
Per cent. of profits on total capital paid up	6·2	3·9	5·8	8·4

N.B.—Steamer receipts and expenses are excluded from this table except in the two columns for 'percentage of profits on total capital expended' and 'capital paid up.'

The earnings from coaching traffic amounted to Rs. 12,85,016
 „ „ „ goods „ „ „ 29,31,400

The percentage on the total earnings (Rs. 43,56,003) was 29·5 for passenger traffic and 69·3 for goods traffic.

	In 1876 (exclusive of season tickets)	Number of passengers.	Receipts. Rs.
Passenger traffic.	...	1,738,306	10,55,346
„ 1877	...	1,864,790	11,23,732
Difference	...	126,484	68,386

Details of Passenger Traffic.

300

BENGAL ADMINISTRATION REPORT.

(1877-78.)

DESCRIPTION OF CLASSES.	NUMBERS CON- VEYED.		INCREASE IN 1877.	DECREASE IN 1877.	INCREASE PER CENT.	DECREASE PER CENT.	AVERAGE MILEAGE 1877.	RECEIPTS.		INCREASE IN 1877.	DECREASE, 1877.	INCREASE PER CENT.	DECREASE PER CENT.
	1876.	1877.						1876.	1877.				
1st class	34,153	29,553	.....	4,600	.....	13.5	27.73	Rs. 44,429	Rs. 42,749	.....	1,680	.....	3.78
Total percentage of passenger traffic	1.36	1.51	.....	.....	.....	.....	.....	4.15	3.76	.....	.....	.....	.....
2nd class	55,462	49,543	.....	5,919	.....	10.67	25.12	36,230	33,082	.....	2,148	.....	6.09
Per cent. of total passenger traffic	3.91	3.34	.....	.....	.....	.....	.....	3.29	2.91	.....	.....	.....	.....
3rd class	4,29,043	396,204	.....	32,839	.....	7.65	30.14	2,44,331	2,31,092	.....	13,239	.....	5.40
Per cent. of total passenger traffic	29.29	29.13	.....	.....	.....	.....	.....	22.32	20.32	.....	.....	.....	.....
4th class	1,323,374	1,457,630	.....	134,256	.....	12.41	35.95	7,46,365	8,20,235	.....	73,870	.....	11.25
Per cent. of total passenger traffic	71.84	75.79	.....	.....	.....	.....	.....	69.74	73.61	.....	.....	.....	.....
Total ...	1,842,067	1,662,930	.....	179,137	.....	6.50	34.11	10,70,185	11,37,101	.....	66,916	.....	6.25
Per cent. of passenger traffic to total traffic .....	.....	.....	.....	.....	.....	.....	.....	33.9	30.14	.....	.....	.....	.....

Goods Traffic.

Details of Goods Traffic.

	WEIGHT CARRIED.		Increase in 1877.	Decrease in 1877.	RECEIPTS.		Increase, 1877.	Decrease, 1877.
	1876.	1877.			1876.	1877.		
<i>Merchandise.</i>	Tons.	Tons.	Tons.	Tons.	Rs.	Rs.	Rs.	Rs.
For the public ...	295,119	440,010	144,891	.....	1,937,663	28,49,506	9,11,843	.....
Military stores ...	135	107	.....	28	1,310	516	.....	764
Railway construction ...	2,396	1,805	.....	591	1,571	3,451	1,160	.....
<i>Minerals.</i>								
For the public ...	6,563	11,600	5,037	.....	19,055	42,499	23,444	.....
Railway construction ...	.....	.....	.....	.....	.....	.....	.....	.....
Live-stock ...	.....	.....	.....	.....	363	425	62	.....
Rent, demurrage, and wharfage ...	.....	.....	.....	.....	15,311	35,393	20,082	.....
Total ...	304,213	453,522	149,309	.....	1,975,273	29,31,400	9,56,127	.....
Percentage of goods traffic to total traffic ...	.....	.....	.....	.....	62.52	67.30	.....	.....

The following table gives an abstract of the dealings of the termini Sealdah and Chitpore with other stations :—

Abstract of Goods forwarded from, and received at Calcutta station during the years 1876 and 1877.

	RECEIVED AT CALCUTTA.		Increase, 1877.	Decrease, 1877.	FORWARDED FROM CALCUTTA.		Increase, 1877.	Decrease, 1877.
	1876.	1877.			1876.	1877.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Beer, spirits, and wine ...	.....	.....	.....	.....	320	396	76	.....
Brass-ware ...	200	201	1	.....	462	663	201	.....
Chillies ...	1,027	862	.....	165	.....	.....	.....	.....
Coal ...	2,099	329	.....	1,770	3,763	8,290	4,527	.....
Cotton ...	293	906	613	.....	457	531	74	.....
Dall, grain, and pulses ...	11,251	34,836	23,585	.....	97	80	.....	17
Flour ...	.....	.....	.....	.....	95	176	81	.....
Ghee ...	13	33	20	.....	48	30	.....	12
Gunny-bags ...	5,650	3,757	.....	1,893	125	1,017	892	.....
Hides ...	4,357	3,896	.....	461	.....	.....	.....	.....
Indigo ...	369	549	.....	.....	.....	5	5	.....
Indigo seeds ...	172	76	.....	96	140	609	469	.....
Jute ...	144,596	128,015	.....	16,581	.....	.....	.....	.....
Linsced ...	11,661	22,125	10,564	.....	.....	.....	.....	.....
Mustard seed ...	10,708	16,806	6,158	.....	.....	.....	.....	.....
Piece-goods ...	153	75	.....	80	10,217	12,084	1,867	.....
Rice ...	14,043	112,920	98,877	.....	639	580	41	.....
Salt ...	.....	.....	.....	.....	16,326	21,302	5,976	.....
Seeds not otherwise classified ...	2,418	2,453	35	.....	41	36	.....	5
Sugar ...	8,446	9,307	1,421	.....	905	504	.....	401
Tea ...	421	471	50	.....	.....	.....	.....	.....
Tobacco ...	11,131	7,567	.....	.....	.....	.....	.....	.....
Turmeric ...	4,987	4,632	698	.....	.....	.....	.....	.....
Miscellaneous, in- cluding railway materials ...	3,376	11,200	7,833	.....	19,845	20,923	1,078	.....
Total ...	236,375	361,484	125,109	.....	52,380	67,232	14,852	.....

Working expenses.

The working expenses are given in the following table:—

Abstract of Working Expenses during the years 1876 and 1877.

HEADS OF CHARGE.	Expenses, 1876.	Expenses, 1877.	Increase, 1877.	Decrease, 1877.
	Rs.	Rs.	Rs.	Rs.
Maintenance	2,54,408	3,35,670	77,262	.....
Locomotive	3,40,928	3,82,817	41,889	.....
Carriage and Wagon	1,37,833	1,43,875	6,042	.....
Traffic	4,14,630	5,09,655	94,965	.....
General charges	2,76,583	2,86,340	9,757	.....
Steam-boat	2,40,366	2,61,955	21,589	.....
Special and miscellaneous	12,814	59,195	46,355	.....
Total	16,81,652	19,82,511	3,00,859	.....

Details of the flotilla traffic from the year 1874 to 1877 are given below:—

Steamer Traffic.

YEARS.	Earnings.	Expenses.	Deficit.	Profits.
	Rs.	Rs.	Rs.	Rs.
1874	4,27,133	3,02,117	.....	1,24,986
1875	2,92,799	2,49,706	.....	43,093
1876	3,38,570	2,40,366	.....	98,204
1877	4,71,031	2,64,955	.....	2,06,076

	1876.		1877.	
	Tons carried.	Earnings.	Tons carried.	Earnings.
		£		£
Dacca service	52,572	19,022	76,884	28,672
Serajgunge service	41,695	12,001	46,978	13,508
Miscellaneous ... ..	.....	13	.....	907
Total	97,267	31,036	1,23,862	43,177

The working expenses of—

	1876.	1877.
	Rs.	Rs.
The Dacca service	1,63,854	1,83,513
„ Serajgunge „	74,574	74,814
Miscellaneous ... ..	.....	6,633
Total	2,38,428	2,64,960

STATE RAILWAYS.

In May 1877 the State Railways in Bengal, which were previously administered by the Director of State Railways under the Government of India, were made over to the control of the local Government, in accordance with the resolution of the Government of India in the Financial Department, No. 195 of 22nd April 1877, by which the local Government becomes responsible to the Government of India for interest on the capital expended on reproductive works.

The railways then made over to the Provincial Administration consisted of the following lines, either completed or in course of construction :—

- I.—The Northern Bengal State Railway.
- II.—The Tirhoot State Railway.
- III.—The Nulhattee State Railway.
- IV.—The Calcutta and South-Eastern State Railway.

I.—The Northern Bengal consists of—1st, a branch line, about 13 miles in length, leading from the Poradah station, on the Eastern Bengal Railway, to Danookdeah, on the south bank of the Ganges. This, being in connection with the Eastern Bengal Railway, has been constructed on the broad or $5\frac{1}{2}$ -feet gauge; and 2nd, of a metre gauge line, 172 miles in length, from Sara, on the south bank of the Ganges, to Julpaiguri, with a branch to Rungpore, from the Parbatipore station, 23 miles in length. The portion from Julpaiguri to the Atrai river, 134 miles in length, was opened for a limited day-traffic in August 1877, and the whole line from Poradah to Julpaiguri was formally opened by the Lieutenant-Governor in January 1878.

An extension from Julpaiguri to Silligoree, near the foot of the Darjeeling hills, was sanctioned in November 1877, and the works were pressed on rapidly. The permanent-way was laid over temporary bridges, and the line was open for goods traffic only on the 10th June 1878.

It is proposed to extend the Rungpore branch immediately to the river Teesta, about 11 miles from Rungpore, and ultimately to Dhubri, on the Brahmaputra, about 54 miles further, in order to facilitate communication with Assam.

The Northern Bengal Railway serves some of the richest districts in Bengal, and is expected to carry a very heavy traffic in tobacco, grain, seeds, and jute. When the extension from Jalpaiguri to Silligoree is complete, it will serve the important tea interest of the Darjeeling district.

II.—The Tirhoot Railway starts from the Barh station of the East Indian Railway, with a broad gauge branch about 3 miles in length, to the south bank of the Ganges. From the north bank of the river a metre gauge line has been constructed to Durbhunga and Mozufferpore, the distance from the river-bank to Mozufferpore being about 52 miles, and the length of the Durbhunga branch about 23 miles.

Surveys have been made for a railway to connect the Tirhoot with the Northern Bengal Railway through the districts of Purneah and Dinagepore, but it is doubtful whether this scheme will be carried out, though a short extension eastward from Durbhunga may probably be

constructed shortly. A survey has also been made for an extension from Mozufferpore to Motiharee, Segowlie, and Bettiah, and this line will probably be commenced at an early date.

It is possible that hereafter a railway may be constructed from some point on this line so as to serve the Goruckpore district of the North-Western Provinces.

III.—The Nulhattee State Railway starts from the Nulhattee station of the East Indian Railway, and is carried along what was originally constructed as a feeder-road to Azimgunge on the Bhagirutty nearly opposite Moorshedabad. The line is $27\frac{1}{4}$ miles long, and was constructed by the Indian Branch Railway Company on a 4-foot gauge. That Company having merged into the Oudh and Rohileund Railway Company, this detached line was purchased by Government in 1872.

IV.—The Calcutta and South-Eastern Railway was constructed under Government guarantee to serve the auxiliary port of Canning on the Mutlah, and at one time very high hopes were entertained of its success. As, however, no such development of traffic as was expected took place, and the line scarcely paid its working expenses, it was surrendered to Government in 1868. The length of this railway is 28 miles.

As there is a dense population and an enormous rice trade in the heart of the 24-Pergunnahs, it is proposed to extend the Calcutta and South-Eastern Railway from Sonapore *via* Barripore, Mugra, and Joynuggur to Bishlopore, and possibly to Diamond Harbour, a distance of about 35 miles.

In February 1878 the Government of India accorded sanction

to the construction of a railway from the Bankipore station of the East Indian Railway to Gya.

This line will be 58 miles in length, and is being constructed on the broad or 5½-foot gauge, in order that it may be worked by the East Indian Railway. An extension of this line may possibly be hereafter made to open up the Palamow coal-fields and the neighbouring country, whence, owing to difficulties of transport, the agricultural produce cannot be exported.

The inhabitants of Dacca and Mymensingh have expressed great anxiety for railway communication in those

Proposed new lines.

districts, and a survey has been made for a line starting from opposite Goalundo, the terminus of the Eastern Bengal Railway, to serve Dacca and Mymensingh. Should this line be constructed, it will probably be extended to Naraingunge, an important mart on the Megna river, and may hereafter be connected by means of a steam ferry to Daoodkandy, with a line starting from that place for Tipperah and Chittagong.

An examination of the country has also been made to test the practicability of extending this railway from Mymensingh into the Assam valley, either across the Garo Hills or round between these hills and the Brahmaputra river.

Another railway is projected to serve the Nuddea and Jessore districts; this will probably commence at Bagwangola, on the Ganges, and be taken past Jeeagunge, Moorshedabad, Berhampore, Kishnaghur,

and Santipore to Ranaghât, on the Eastern Bengal Railway. Crossing that railway at this place it will be carried on *viâ* Bongong and Jessore to Koolna, with a connection from Bongong *viâ* Baraset and Dum-Dum to Calcutta.

NORTHERN BENGAL STATE RAILWAY.

The first section of this line was opened for limited day-traffic on the 28th August 1877, viz. from Julpaiguri to Atrai, a length of 134 miles.

I.—GENERAL SUMMARY.

On the 18th of January 1878 the line was formally opened throughout its entire length from Julpaiguri to Poradaha Junction on the Eastern Bengal Railway, a distance, excluding the ferry, of 186 miles.

The embankment was finished during the year, and the completion of the Bural, Atrai, and Baraloe bridges finished the bridge-work on the main line.

About 32 miles of line and sidings were laid, and the ballasting was nearly completed.

Temporary workshops were erected at Saidpore.

Passenger buildings were commenced at all stations, and are nearly finished.

Quarters for the European staff have been built at Sara, Saidpore, Julpaiguri, and other places on the line.

Temporary waiting and goods sheds have been built at most of the stations.

The engine shed at Saidpore is nearly finished, and masonry goods sheds at Nattore, Saidpore, Darwani, and Julpaiguri are ready for roofing.

The work on the Poradaha section, with the exception of the Murra Goraie bridge, was completed.

Through booking with the Eastern Bengal Railway was established for passengers and goods from 1st March 1878.

Traffic Department.

From the date of through opening 1st class fares were increased from 8 to 10 annas per station distance, and 2nd class fares from 4 to 6 annas.

From the 18th February 1878 parcel rates were changed from 4 annas for every eight stations to 4 annas for every hundred miles.

The gross earnings of the line from 28th August 1877 to 31st March 1878 were Rs. 1,83,784.

The Locomotive and Carriage and Wagon Departments were placed under a Locomotive Superintendent, who joined the line from the East Indian Railway on the 8th November 1877.

The earthwork of the branch from Parbatipore to Rungpore was finished during the year, as well as the brickwork of the large bridges. The culverts have been nearly all finished, and two-thirds of the line is ballasted.

An extension from Rungpore to the Teetsa was sanctioned, and work was commenced in February and about three-fifths of the bank was finished at the close of the year.

Work was commenced on the Julpaiguri-Silligoree extension in December 1877, and about five-sixths of the earthwork and a considerable amount of the bridging were completed by the 31st March 1878.

Three survey parties worked in Assam and in the Dacca Division, completing 60 miles of staking out, 172 miles of trial survey, and 310 miles of reconnoissance.

Surveys.

The survey parties of the previous season completed the reports and estimates at Darjeeling.

The upper section of this line from Atrai to Julpaiguri was opened some months prior to the lower section, in order to afford an opportunity for collecting and organizing a working staff, as it was feared that any attempt to open 186 miles of line and a steam ferry in one day would be met with considerable difficulty. That this anticipation was correct has been proved by the trouble still experienced in obtaining and retaining a competent working staff. The difficulties met with at starting were great, and in some points peculiar to this line. The climate of the districts through which it runs is peculiarly unhealthy, and living is expensive. Consequently the class of men who present themselves for employment is not of the highest order. If a man can get employment elsewhere, he will not come to the Northern Bengal State Railway to look for it. A Traffic Superintendent was not appointed till some time after the line was opened, and consequently the onus of the work fell on the Engineer-in-Chief, who had plenty of other work to attend to. The present Traffic Superintendent, who has had some years' experience on the East Indian Railway, joined the line on the 30th January 1878, and since then has been working hard in endeavouring to organize an efficient establishment.

The general result of the working of the line goes to show that a successful future may be predicted for it. The details of the traffic working will be discussed under that head. But until the line is opened to Silligoree at the foot of the hills, and the branch line to Bungpore and the Teesta is complete, it cannot be expected that the full results will be obtained.

In regard to the traffic results of this year it must be remembered that the line was opened while still in a very unfinished state, the rolling-stock was very deficient, and, owing to the insufficiency of the grants for capital expenditure in previous years, the station buildings were scarcely begun, and none of the usual conveniences for traffic were ready. Every effort has been made since the opening to remedy these defects; but, owing to the unhealthiness of the districts and the difficulty of obtaining skilled labour, some time must yet elapse before the line is adequately provided with all necessary appliances.

Owing mainly to the paucity of rolling-stock on the line the merchants were disappointed in obtaining prompt despatch of their goods at first, and in consequence they still continue to use the water route to a great extent, as a highway to Calcutta, and will probably do so as long as the means of approach to some of the stations are so bad. The want of feeder roads is very great, and requires early attention.

It is expected that the Eastern Bengal Railway Company will either lease or buy the Poradaha section. They now work it on behalf of the State Railway.

The ferry cannot at present be said to be efficient, and can hardly be so until the railway gets the steamers and flats into its own hands. The steamers and flats for the railway are now under construction.

The embankments, bridges, and permanent-way of the main line were completed during the year. Temporary workshops, sufficient for requirements until the permanent ones are built, were erected at Saidpore. The station buildings, station machinery, engine sheds, goods sheds, and staff quarters, were proceeded with, and corrugated iron goods-sheds of a temporary character were erected at nearly all the minor stations where traffic required them.

The River Teesta at Julpaiguri was at one time a source of anxiety, as it was cutting towards the railway, but a judiciously placed spur has had the effect of causing it to silt up where the danger originally lay.

All the earthwork was finished and the brickwork of the large bridges completed, and the girders are being erected. The culverts have been nearly all finished. The station at Badargunj is nearly finished, and those at Rungpore and Shampore have been commenced.

The earthwork was completed during the year, and the bridge across the Murra Gorai nearly so, the traffic being worked over the river on a diversion pending completion of bridge. Telegraph offices, station-masters' houses, and all necessary temporary waiting-rooms and offices, are finished.

For the purposes of comparison the review of the traffic working is divided into two periods,—1st, that from the 28th August 1877 to 18th January 1878, when the line was only open to Atrai; and 2nd, that from 19th January to 31st March 1878, when the line was open throughout to Poradaha. Taking the first period, a space of about 22 weeks, there were 34,265 passengers carried, and the earnings accruing from them amounted to Rs. 19,395; of goods, 3,907 tons were carried, which realized Rs. 15,678.

In the 2nd period of 10 weeks 64,331 passengers were carried, giving Rs. 47,357; and 8,386 tons of goods were carried, which earned Rs. 61,318. The earnings from passengers and goods during the whole period were Rs. 1,43,748, of which Rs. 35,073 were earned in the first period and Rs. 1,08,675 in the second; the miscellaneous earnings during the year were Rs. 40,036, making the gross earnings Rs. 1,83,784. Hence it will be seen that earnings of the second period exceeded those of the first by about 700 per cent. This is very satisfactory, and shows the great advantage derived from the through opening of the line in connection with the Eastern Bengal Railway. Of all the staples carried, rice shows the most marked increase. It literally poured into the stations of Phulbari, Hillee, and Berhampore, and it was found that the available rolling-stock was quite inadequate to work it off.

The iron-work for 200 new covered goods wagons was in consequence immediately ordered from England, and it is hoped that when

these arrive the rolling-stock will be found sufficient to meet all emergencies.

It is feared that "the average load" of goods wagons on this line will always be a low one, as the natural flow of traffic is towards the port, thus necessitating much empty "up" running. Time, however, may tend to increase the upward traffic, but at present the proportion of "up" to "down" is somewhere about 30 to 100. The empty mileage, however, is not the only cause of the low average load, and light loading, due to the inexperience of the station staff, may be looked upon as another reason. Time will, of course, obviate this when a proper system of supervision and working is introduced.

Locomotive Depart-

When the railway was opened the following rolling-stock was on the line:—

Locomotives	36
Carriages	68
Wagons	374

and during the year it was supplemented by 53 more vehicles, but the stock is still very deficient.

The engines are worked entirely from Saidpore, the runs being from Saidpore to Sara and Saidpore to Julpaiguri. By this arrangement the whole of the men and engines are directly under the supervision of the Locomotive Superintendent.

Since the beginning of January there were 9 failures of engines, which were due to defects since remedied.

The number of engines employed in daily running was 18, three of which were employed in ballasting for the Engineering Department; 12 engines were employed in working traffic trains, and their average daily mileage was 55, or 1,655 miles per mensem.

The total consumption of coal was 952½ tons, or 28½ lb per engine mile, which is heavy, and is due to the large number of ballast trains employed, which showed a very small mileage.

The repairs to the vehicle stock have been heavier than should have been, and are due to the inexperience of the traffic staff in loading. The coaching stock suffers considerably from exposure to the weather, there being no carriage sheds as yet on the line.

Great difficulty is experienced in obtaining labour: even unskilled labour is not to be had in the district, all having to be imported.

During the year under review eight persons were killed: two before the opening of the line (a cooly sirdar from his own incaution, and a cloth merchant while trespassing), and six after the line was opened for traffic. Of these latter, one was a native passenger, who fell from a 1st class carriage, one a trespasser, and four servants of the railway.

Accidents.

The "Teesta Extension" from Rungpore was commenced in February 1878 under an Executive Engineer.

Extensions.

The earthwork is nearly finished. It is hoped that early sanction to this short length as a railway may be granted by the supreme Government.

The Julpaiguri-Silligoree Extension was commenced in November 1877 under an Executive Engineer. A large portion of the line had to be re-staked out, but the work was proceeded with so vigorously that by the end of February 1878 all the earthwork was finished, and plate-laying was commenced at the Julpaiguri end in January.

About half the culverts were finished, and the others well advanced at the close of the year.

Temporary stations were commenced at Silligoree and Shikarporo, and the necessary offices constructed with a view to opening the line for goods traffic before the rains.

As it was impossible to have the masonry bridges completed before the rains, it was determined to take the rails over temporary crib pier bridges. The country through which the line passes is very unhealthy, and the work was much retarded by sickness amongst the work-people. But the progress has been very satisfactory notwithstanding, and much credit is due to the Executive Engineer and his assistants for the way in which they pushed on the work.

The survey of the proposed Dacca-Mymensingh Railway was commenced in January 1878 under an Executive Engineer. The line was carried from Goalundo direct to Dacca and Naraingunge, three alternative lines having been surveyed between Subhar and Dacca. From Dacca the line runs north to Mymensingh. The total length surveyed is 172 miles, of which 83 miles pass through hills and broken ground. In addition a reconnoissance of 160 miles was made.

The staking out of the Rungpore Branch Extension to Dhubri was commenced in January 1878.

The officer in charge of the surveys also made a reconnoissance of the country round the western slope of the Garo Hills from Goalpara to Mymensingh; 25 miles of the most difficult part of this country were levelled over.

Comparative Statement of Traffic on the Northern Bengal State Railway for the calendar year 1877.

HEADS OF TRAFFIC.		PASSENGERS.							
		NUMBERS.		RECEIPTS.					
		1876.	1877.	Increase.	Decrease.	1876.		Increase.	Decrease.
						1876.	1877.		
						Rs.	Rs.	Rs.	Rs.
1st class	113	113	...	...	538	...	...
2nd "	631	631	...	...	1,262	1,262	...
3rd "	25,695	25,695	...	...	13,350	13,350	...
Total		...	26,439	26,439	...	...	15,150	15,150	...
Miscellaneous	858	858	...

*Comparative Statement of Traffic on the Northern Bengal State Railway
for the calendar year 1877—concluded.*

HEADS OF TRAFFIC.	GOODS.							
	WEIGHT IN TONS.				RECEIPTS.			
	1876.	1877.	Increase.	Decrease.	1876.	1877.	Increase.	Decrease.
					Rs.	Rs.	Rs.	Rs.
Merchandise for the public ... ..	.....	956	956	...	...	4,272	4,272	...
Materials for railway construction ... ..	.....	1,767	1,767	...	...	6,992	6,992	...
Minerals—								
For the public ... ..	.....	.....	.....	...	.....	.....	.....	...
For railway construction ... ..	.....	686	686	...	.....	2,712	2,712	...
Live-stock	No.	No.	No.	No.	.....	.....	.....	...
Rents, demurrage, &c. ... ..	.....	.....	.....	...	.....	6	6	...

TIRHOOT STATE RAILWAY.

I.—GENERAL SUMMARY.

The stations and buildings were completed.

Open line works. The Barh branch line, three miles in length, connecting the East Indian Railway station at Barh with the Ganges, was commenced and completed during the year.

In order to facilitate the traffic across the river a temporary line along the Diara was laid down, four miles in length, from Bazidpore to Champta Ghât.

The Ganges ferry was taken over and worked by the railway from 10th August 1877. The Barh branch was opened for traffic on 10th November 1877, from which date through-booking with the East Indian Railway was commenced with most satisfactory results.

Locomotive Department. The locomotive temporary workshops were occupied, and the whole stock put in an efficient state of repair.

Extension surveys. Surveys for two extensions were ordered, viz. Mozufferpore to Bettiah and Durbhunga to Pipra Ghât, the field-work for both of which was well advanced at the close of the year under review.

Orders for an estimate for a broad-gauge line from Patna to Gya were issued in July 1877, sanction for the work was given in February 1878, and the works were in hand at the close of the year.

Lines under construction. The line on the Tirhoot side of the Ganges was worked for passengers and goods throughout the year, but the short branch on the south side of the river to connect the ghât with the East Indian Railway

was only opened for goods traffic on the 10th November, and for passenger traffic on the 1st December 1877.

The total cost of the line when completed is now known approximately to be about Rs. 70 000 per mile, including the cost of the ferry, the outlay on which, as well as that on the locomotive workshops, will

II.—DETAILED NARRATIVE.

ultimately be spread over a much greater length of line, and will, it is hoped, reduce the cost per mile to an average of about Rs. 52,000.

The proportion of working expenses to gross earnings is still very high, due partly to the cost of establishment, which, while being necessary, could yet superintend a much greater length of railway, and partly to the nature of the river terminus on north bank of the Ganges, the position of which is liable to constant change, thereby necessitating the taking up and relaying of a certain portion of the line year by year. The handling charges on goods at the ghâts are also very heavy.

During the first half of the year a considerable quantity of work was done in finishing stations, &c., and completing ballasting. The Barh branch line was taken in hand and completed during the year. Early in January it was found necessary to change the position of the river station, and a length of 4 miles of new line was laid down and opened for traffic on the 5th February. Some additions to the staff quarters are still required, as well as an institute at Somastipore.

The increase in traffic during the year is very satisfactory, especially so that of the goods traffic, due to the opening of the Barh branch line and the commencement of the through-booking with the East Indian Railway. This department was conducted throughout the year in a most able manner by the Traffic Superintendent, and the successful results obtained are due in a great measure to his exertions.

Although a block of traffic occurred at one time owing to the incomplete arrangements for the ferry and a sudden large increase in traffic, yet on the whole the public were fairly well served.

The greater part of the goods traffic is from the Durbhunga end of the line; but it is expected that when the Bettiah line is constructed the Mozufferpore line will show an equally good result. At present Durbhunga receives a large portion of the traffic of Nepal, but a greater proportion of the same trade is taken on carts to Sahebgunge and Gopalgunge on the river Gunduk, the whole of which should be intercepted by the Bettiah line.

One great drawback to the usefulness of the railway is the position of the Ganges crossing. The city of Patna is the centre towards which the greater part of the trade of the surrounding districts gravitates, while the line, as laid out, better accommodates direct trade with Calcutta. It is almost certain, that any extension towards Bettiah will also necessitate a connection with Hajeeapore, opposite Patna, and a survey for a line in this direction will be put in hand during the ensuing cold season, and even if the Bettiah extension is not made the line should be connected with Hajeeapore.

Locomotive Department.

The quantity of rolling-stock on the line at the beginning of the year was—

Locomotives	...	...	...	...	8
Carriages	...	...	...	...	32
Wagons	...	...	...	...	146

and this was supplemented during the year by—

Engines	...	...	...	...	2
Carriages	...	...	...	...	9
Wagons	...	...	...	...	55

Accidents.

During the year four persons were killed by running of trains. One, a ballast cooly, through incaution, and the remaining three trespassers.

Sanction to commence the works on this line was given on the 27th February 1878, and a portion of the staff at that time engaged on surveys in Tirhoot was brought in and arrangements made to push on the work with all speed. Engineers were on the ground early in March, and the staking-out was proceeded with; the collection of materials and work-people was also commenced.

Surveys for two extensions of the Tirhoot Railway were ordered during the year,—(1) from Mozufferpore through Motiharee to Bettiah, and (2) from Durbhunga eastward to Allopore. Orders for the first survey were received in June 1877, and the field-work was completed by the end of February 1878. The second survey was only ordered in February 1878, and the field-work was in progress at the end of the year under review.

*Comparative Statement of Traffic on the Tirhoot State Railway
for the calendar year 1877.*

PASSENGERS.								
HEADS OF TRAFFIC.	NUMBERS.		Increase.	Decrease.	RECEIPTS.		Increase.	Decrease.
	1876.	1877.			1876.	1877.		
					Rs.	Rs.	Rs.	Rs.
1st class	1,160	2,763	1,603	.....	2,636	6,319	3,683	.....
2nd "	1,969	5,440	3,471	.....	1,932	6,320	4,388	.....
3rd "	1,16,203	340,390	224,187	.....	43,122	1,30,119	86,997	.....
Total	1,19,332	348,593	229,261	.....	47,691	1,42,757	94,776	.....
Miscellaneous				.....	3,166	11,048	7,882	.....

GOODS.								
HEADS OF TRAFFIC.	WEIGHT IN TONS.		Increase.	Decrease.	RECEIPTS.		Increase.	Decrease.
	1876.	1877.			1876.	1877.		
					Rs.	Rs.	Rs.	Rs.
Merchandise for the public	33,726	34,969	1,193	.....	64,796	90,849	26,052	.....
Materials for railway construction	2,060	1,873	.....	1,087	3,967	2,430	.....	637
<i>Minerals.</i>								
For the public	187	721	594	.....	262	1,536	1,274	.....
For railway construction	1,937	473	.....	573	1,038	547	.....	491
	No.	No.	No.	No.				
Livestock	26	.....	.....	26	11	.....	.....	11
Rents, demurrage, &c.	.....	.....	.....	.....	86	900	814	.....

NULHATTEE STATE RAILWAY.

A considerable renewal of sleepers was effected, as well as of fish-plates and bolts.

I.—GENERAL SUMMARY.

Engineering Department.

The worst portions of the line were ballasted with laterite obtained from the Nulhattee hills.

The Nulhattee workshops and stores were completed.

Improved arrangements for washing out locomotives were put in hand at Nulhattee.

Locomotive Department.

The engines and vehicles were maintained in fair working order.

Traffic Department.

Both the coaching and goods traffic showed a marked improvement during the year.

Sleepers to the number 7,615 were renewed during the year. The

II.—DETAILED NARRATIVE.

Engineering Department.

original sleepers, or rather pressure plates and tie rods, are quite worn-out and useless, and during the coming year it is intended to renew the line from end to end. Permission has been obtained from the supreme Government to increase the capital account of the railway by another lakh of rupees, and a capital budget for the ensuing year has been prepared, working up to that amount, to be expended in sleepers and fastenings.

The road requires ballasting from end to end, next to none having ever been spread; and if the line is to be altered to it will be necessary to ballast it thoroughly throughout its entire length. Ballasting is now only done in dribbles here and there, where most required, as over bridges and on the low parts of the line.

Some of the bridges and culverts were repaired during the year, and earth cushions put over them.

The stations and buildings were maintained in good order during the year. The Assistant Manager's bungalow, which has been cracked from top to bottom for many years past was condemned, and an estimate for a new bungalow sanctioned. The dismantling of the old bungalow, and preparations for commencing work on the new one, were in hand at the close of the year.

The construction of the Nulhattee store and workshops was completed during the year, with the exception of the entrance gates. The improved arrangements for washing out engines were also put in hand, and, it is hoped, will be finished early in the ensuing year.

The demarcation of the railway held by boundary pillars was also effected during the year under review.

Locomotive Department.

Throughout the year the rolling-stock on the line was—

Engines ...	...	...	...	...	6
Carriages ...	...	...	...	...	11
Wagons ...	...	...	...	...	18

The engines were all maintained in working order, and some of their wheels were re-tired. The tyres of the wheels on most of the rolling-stock were in a very bad condition; 24 pairs of wagon wheels were provided with new axles and tyres during the year, and it is hoped that before the end of next year they will all have been renewed.

Both the Nulhattee and the Calcutta and South-Eastern lines in this Department have been placed under the orders of the Locomotive Superintendent of the Northern Bengal State Railway, and the arrangement seems to work well.

The passenger traffic during the year showed a marked improvement when compared with that for previous years. This improvement is partly due to the introduction of double train service, and partly to the reduction of fares, and, to a certain extent, to the brisk grain traffic engendered by the famine in Madras.

The goods traffic also showed signs of improvement, principally due to the grain traffic to the famine districts. There has been a falling off in the coal trade in consequence of the indigo-planters and others around Moorshedabad being able to get their coal carried cheaper by the river route than by the railway.

The compensation paid for damaged grain was rather heavy this year, caused in a great measure by the inability of the East Indian Railway to provide wagons at Nulhattee and by their suddenly stopping the through-booking arrangements.

Accidents.

No accidents occurred during the year resulting in injury to limb or loss of life.

Comparative Statement of Traffic on the Nulhattee State Railway for the calendar year 1877.

HEADS OF TRAFFIC.	PASSENGERS.							
	NUMBERS.		Increase.	Decrease.	RECEIPTS.		Increase.	Decrease.
	1876.	1877.			1876.	1877.		
					Rs.	Rs.	Rs.	Rs.
1st class	970	1,024	54	...	2,207	2,483	216	...
2nd „	5,704	6,722	1,018	...	4,118	4,756	638	...
3rd „	94,199	112,972	18,773	...	37,138	42,324	5,186	...
Total	100,873	120,718	19,845	...	43,543	49,563	6,020	...
Miscellaneous ... ..	...	...	...	...	4,357	6,000	1,702	...

HEADS OF TRAFFIC.	GOODS.							
	WEIGHT IN TONS.		Increase.	Decrease.	RECEIPTS.		Increase.	Decrease.
	1876.	1877.			1876.	1877.		
					Rs.	Rs.	Rs.	Rs.
Merchandise for the public	7,524	14,834	7,310	...	18,764	28,175	9,411	...
Materials for railway construction ... ..	...	...	...	...	...	...	...	...
Minerals—								
For the public	4,170	2,352	...	1,818	6,796	3,601	...	3,195
For railway construction ... ..	...	...	...	...	...	...	...	...
	No.	No.	No.	No.				
Live-stock ... ..	...	...	...	...	...	...	...	...
Rents, demurrage, &c. ... ..	...	...	...	...	471	642	171	...

CALCUTTA AND SOUTH-EASTERN STATE RAILWAY.

The renewal of sleepers in road was continued, bricks were burnt and broken up for ballast. The timbers of several of the bridges and culverts were renewed. Petty repairs were done to the stations which stood in need of them, and some new sidings were put in when traffic demanded them.

I.—GENERAL SUMMARY.

Engineering Department.

Traffic Department.

The old classification of upper and lower class passengers was altered to 1st, 2nd, and 3rd class.

A revision of the goods rates was also made.

A marked improvement in both passenger and goods traffic took place during the year.

Locomotive Department.

The engines and rolling-stock were maintained in good order.

Extension Survey.

At the close of the year a survey was ordered to be made from Sonarpore to Culpee *via* Mugra, and was put in charge of an Executive Engineer lent by the Irrigation Department for the purpose.

The number of sleepers renewed during the year was 5,000. They were all creosoted pine from England. The ballast bricks which were burnt in the previous year were broken up and are now ready for use; more will be burnt during the coming year.

II.—DETAILED NARRATIVE.

Engineering Department.

Several of the bridges and culverts were repaired, and the bridge over the Tolly's Nullah had its longitudinal sleepers renewed.

One culvert near the Basra station was permanently closed, in order to confine the spill from the Bidyadhuree river during floods.

The siding at the Ballygunge station was extended to meet the requirements of traffic, and a "pick-up" station was erected at Dhakuria. A new building for Chappahattee station was also sanctioned at the close of the year.

During the year under review a strike occurred amongst the maintenance establishment, but it was of an unimportant character. When fresh men were brought from the Nulhattee line, the old gangs immediately returned to work. The alleged cause of the strike was that the wages were lower than on the Eastern Bengal Railway; but this was untrue, and it is probable that the real cause was petty oppression on the part of the head mistresses of gangs.

Locomotive Department.

Throughout the year the rolling-stock on the line was —

Engines (including two under repairs)	...	...	61
Carriages	...	...	52
Wagons	...	...	282

Heavy repairs to the engines having been executed in previous years, the repairs during the year under review were of a trifling nature. Two engines, which had been undergoing thorough repairs in the Eastern Bengal Railway shops, were returned. Two other engines, which were made over to the Great Indian Peninsular Railway during the famine, and which were refused by them on the score of their being

too bad for use, are now undergoing repairs in the Jamalpore workshops.

Heavy repairs were executed to the low-sided wagons, their under-frames having received a thorough renewal. Some upper class carriages were converted into composite first and second class, and the 3rd-class carriages were furnished with canvas screens on the doors and windows.

From the 1st October 1877 the old upper and lower class fares were altered to 1st, 2nd, and 3rd class, the rates being 18 pies, 9 pies, and 3 pies per mile respectively. This new rate only effected an alteration in the 1st class fare, the 2nd and 3rd remaining the same as the upper and lower were before. As the number of 1st class passengers is very small on this line, it is probable that the improvement in the receipts from passengers is due to an increase in the numbers conveyed rather than to the change noted above. This increase in numbers may be attributed to the revival of the rice mills at Canning, and to the introduction of 3rd class return tickets, and of double-journey tickets for garden produce vendors between Calcutta and Sonarpore.

A revision of goods rates also took place in October 1877. The principal change was the adoption of the State Railway system of three classes only on a mileage basis of $\frac{1}{3}$ pie, $\frac{2}{3}$ pie, and 1 pie per maund per mile. respectively. These rates being higher than the old ones, at first, as was to be expected, met with considerable opposition from the merchants, especially from the fire-wood dealers; but they were not long in giving in, and the result was a considerable increase in the receipts from the goods traffic. But the principal cause of this increase is doubtless the rice trade from the Canning mills and the coal traffic to them. Altogether the traffic on this line has shown signs of considerable improvement, and receipts are now considerably more than the working expenses, as may be seen from the following statement:—

YEAR.				Earnings.	Expenditure.	Net earnings.	Train mile.
				Rs.	Rs.	Rs.	
1877	...	...	...	1,18,487	96,848	21,639	42,920
1876	...	...	...	98,343	1,06,827	—8,484	42,124

Accidents. No accidents occurred during the year resulting in injury to limb or loss of life.

A survey for a line from the Sonarpore station into the heart of the 24-Pergunnahs district was ordered just at the close of the year. It is expected that a line

Surveys. in this direction will attract a large passenger traffic and serve the important rice trade of the district. The line will also probably be taken on to the banks of the Hooghly either at Culpee or at Diamond Harbour.

Comparative Statement of Traffic on the Calcutta and South Eastern Railway for the calendar year 1877.

HEADS OF TRAFFIC.	PASSENGERS.							
	NUMBERS.		Increase.	Decrease.	RECEIPTS.		Increase.	Decrease.
	1876.	1877.			1876.	1877.		
					Rs.	Rs.	Rs.	Rs.
1st class	201	201	.....	.....	.....	306	306	.....
2nd "	3,361	3,573	212	.....	2,062	2,225	163	.....
3rd "	513,910	551,533	37,593	.....	64,979	72,104	7,125	.....
Total	517,301	555,307	38,006	.....	67,041	74,635	7,594	.....
Miscellaneous ... ..	.....	.....	.....	.....	2,331	4,919	2,588	.....

HEADS OF TRAFFIC.	GOODS.							
	WEIGHT IN TONS.		Increase.	Decrease.	RECEIPTS.		Increase.	Decrease.
	1876.	1877.			1876.	1877.		
					Rs.	Rs.	Rs.	Rs.
Merchandise for the public	29,963	30,016	53	.....	26,156	27,694	1,538	.....
Materials for railway construction ... ..	.....	.....	.....	.....	.....	.....	.....	.....
Minerals—								
For the public	3	428	425	.....	10	435	425	.....
„ railway construction ... ..	.....	.....	.....	.....	.....	.....	.....	.....
	No.	No.	No.	No.				
Live-stock	88	116	28	.....	94	124	30	.....
Rents, demurrage, &c. ... ..	.....	.....	.....	.....	456	67	.....	419

Abstract of comparative statement of traffic of the Bengal Provincial Railways for the calendar years 1876 and 1877.

RAILWAY.	Miles open.		PASSENGER TRAFFIC.				GOODS TRAFFIC.				Miscellaneous receipts.		
			Numbers.		Receipts.		Weight in tons.		Receipts.				
	1876.	1877.	1876.	1877.	1876.	1877.	1876.	1877.	1876.	1877.	1876.	1877.	
Northern Bengal	...	134	.....	26,430	...	15,150	...	3,408	...	1,007	...	19,590	
Tirhoot	...	44	79	119,332	348,593	47,991	1,42,767	27,921	37,977	69,163	95,362	62,261	61,428
Nulhattee	...	271	273	100,873	120,718	43,543	40,563	11,694	16,186	25,560	31,866	6,007	8,026
Calcutta and South-Eastern		28	28	517,301	555,307	67,041	74,635	29,963	30,444	26,160	28,129	5,136	15,723

Abstract of comparative statement of traffic of the Bengal Provincial Railways for the calendar years 1876 and 1877—concluded.

RAILWAY.	Total receipts.				Working expenses.		Net profits.		Net loss.		Staff employed.		
	1876.	1877.	Increase.	Decrease.	1876.	1877.	1876.	1877.	1876.	1877.	European and East Indian.	Native.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.			
Northern Bengal	.....	48,717	48,717	...	.....	68,347	...	...	...	19,630	83	823	
Tirhoot	1,79,415	2,99,567	1,20,152	...	1,23,196	2,09,252	56,219	90,305	...	...	28	631	
Nulhattee	75,200	89,455	14,255	...	83,581	89,876	...	...	8,384	421	1	168	
Calcutta and South-Eastern.	98,343	1,18,487	20,144	...	1,06,827	96,848	...	21,639	8,494	...	4	250	

Statement of results for financial year ending 31st March 1878.

RAILWAY.	Gross receipts.		Working expenses.	Net earnings.	Total capital expended.	Interest on capital expended at 4 per cent.	Excess of interest over net earnings.	REMARKS.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Northern Bengal	1,83,781	1,65,411	18,373	1,56,37,538	6,00,791	5,82,418		
Tirhoot	3,47,865	2,36,840	1,11,025	50,05,119	2,13,857	1,02,832		
Nulhattee	95,907	90,954	5,043	2,71,600	12,225	7,182		
Calcutta and South-Eastern	1,28,537	94,737	33,800	6,90,157	.....	.....		Calcutta and South-Eastern Railway made over to Bengal Government without reference to capital expenditure.

Statement of mileage results for the calendar year 1877.

DETAILS.	Northern Bengal State Railway.	Tirhoot State Railway.	Nulhattee State Railway.	Calcutta and South-Eastern State Railway.
Train mileage	36,743	122,125	44,010	42,840
Gross earnings per train mile	1'33	2'45	2'03	2'77
Expenses per train mile	1'86	1'71	2'04	2'26
Profits per train mile	—53	74	—01	51
Percentage of expenses on earnings	140'29	69'85	100'47	81'74
Percentage of profits on total capital expended	—14	2'01	—15	31
Ditto on cost of open line	—15	2'01	—15	31

Post Office and Telegraph.

THE following statistical information in connection with the working of the postal department in the Bengal circle during the year 1877-78 has been furnished by the Postmaster-General.

There was an increase of 72 post-offices and 41 rural messengers during the past year, but a decrease in the number of letter-boxes and letter-box peons, as shown in the statement below :—

Existing on 31st March 1877.	{	Post-offices	...	...	...	1,033
		Letter-boxes	...	...	...	2,875
		Rural messengers	...	...	...	811
		Letter-box peons	...	...	...	238
Existing on 31st March 1878.	{	Post-offices	...	...	...	1,105
		Letter-boxes	...	...	...	2,701
		Rural messengers	...	...	...	852
		Letter-box peons	...	...	...	226

The following statement shows the distances over which mails were carried on the 31st March 1878, as compared with the previous year :—

Distances as returned on the 31st March 1877.	{	Runners' or boat lines	6,525½
		Mail cart, horse dāk, &c.	257
		Railway	1,073
		Sea	2,900
		Total ...	10,755½
Distances as returned on the 31st March 1878.	{	Runners' or boat lines	5,830
		Mail cart, horse dāk, &c.	115
		Railway	1,203
		Sea	2,900
		Total ...	10,048

During the year general revisions of the arrangements in many of the divisions, both in Bengal and Behar, were completed, which resulted in the closing of several imperial lines and the conversion of other lines into zemindari lines. There was a decrease of 695½ miles of runners' and boat lines, and this in spite of an increase of 170 miles of runners' lines transferred with the Julpigoree district. In mail cart and horse dāk mileage in Bengal there was an increase of 16 miles thus accounted for: 24 miles of mail cart between Chooadangah and Jhenidah, and 11 miles of carriage dāk between Synthia and Beerbhoom, were made runners' lines; 51 miles of runners' lines between Siligoree and Darjeeling were converted into tonga dāk. In Behar 34 miles of pony dāk between Soori and Nya Doomka were abolished, and in consequence

of the opening of the Northern Bengal State Railway the mail cart and passenger service line between Caragola and Siligoree, 124 miles long, was closed. The total increase in Railway mileage was 180 miles in consequence of the opening of the Northern Bengal State Railway. As compared with last year, there was a net decrease of $707\frac{1}{2}$ miles in postal mileage of all kinds.

There were 293 district post-offices, and the total mileage of zemindari lines amounted to 10,983, showing, as compared with last year, a decrease of 28 district post-offices and a nominal increase of six miles in the zemindari lines. The total number of peons attached to the Magistrates' offices were 35, and there were no rural messengers or delivery peons paid from Zemindari Dāk Fund during 1877-78.

The enumeration returns of the Postal Department give an aggregate of over 29 millions (29,318,432) of letters, newspapers, packets, and parcels dealt with by the Imperial Post-office in Bengal during the year 1877-78, as against 27,952,600 during 1876-77. The increase, therefore, was about 4 per cent.

The newspapers registered for transmission by post in Bengal and Behar during the year, and in existence on 31st March 1878, were 180, against 166 on the same date in 1877. Of these 180 papers, 11 were published daily, 60 weekly, four bi-weekly, 19 bi-monthly, and 86 monthly.

Forty-one prosecutions were successfully instituted by the department against officers belonging to it, and 23 against the public for offences against the post-office. There were eight cases of highway robbery of mails, against one last year. Of these two occurred in the 24-Pergunnahs close to Calcutta, one was a boat robbery in the Backergunge district, four took place in the Gya district, and one in the Monghyr district. In four of the cases convictions were obtained against one or more of the accused persons, and in every case the greater part of the plundered mail was recovered.

Two post-offices were built during 1877-78—one at Motiharee, in Chumparun, and the other at Bhuddruck, in Balasore.

[1877-78.]

POST OFFICE AND TELEGRAPH. 321

The question of framing rules under Section 11 of Act VIII (B.C.) of 1862, known as the Zemindaree Dāk Act, was noticed in the Administration Report for 1875-76. In the year under review rules were passed for the purpose of defining the duties and relations of the Magistrates and postal authorities, and for giving proper effect to the provisions of the Act.

The administrative divisions adopted for departmental purposes by the Telegraph Department render it impossible for any return to be furnished showing the working of that department in the Bengal province alone.

The question of establishing a line of telegraph from Dacca to Naraingunge was noticed in last year's Administration Report. Messrs. Wilson & Co. of Naraingunge offered a guarantee of Rs. 150 towards the expenses of working the line, but the Telegraph Department objected to it, pointing out that the probable cost of a third class telegraph office would be Rs. 198 a month. The Government of India, however, agreed to accept the guarantee offered by Messrs. Wilson & Co. for three years, and a telegraph office was accordingly opened at Naraingunge on the 11th August 1878.

Under Section 4, Act I of 1876, Nawab Khajah Ashanoollah of Dacca applied for a license to construct and work a private line of telegraph, about 10 miles in length, between his house in Dacca and his country seat at Bygumbarn. The application was submitted to the Government of India, who declined to allow the Nawab to construct the line himself, but stated that after the line had been erected by the Telegraph Department he might be permitted to work it by his own agency. The Government of India also required the Nawab to guarantee the payment of rent for three years at Rs. 90 per mile for the use of the line. The Nawab expressed his inability to comply with these conditions, and no further steps were taken by Government.

V.—REVENUE AND FINANCE.

(a.)—Imperial Revenue and Finance.

FINANCIAL.

Imperial Service.

Statement showing the Imperial Receipts in 1877-78 as compared with 1876-77.

HEADS OF REVENUE.	Actuals, 1876-77.	Actuals, 1877-78.	1877-78.	
			Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.
I. Land revenue	3,65,68,122	3,68,54,925	2,86,803	.....
III. Forest	2,22,401	4,26,227	2,03,826	.....
V. Assessed taxes	65	97	32	.....
VI. Customs	1,02,06,616	1,17,93,967	15,87,351	.....
VII. Salt	2,57,28,973	2,66,63,602	9,34,629	.....
VIII. Opium	6,17,11,706	6,12,56,108	25,14,402	.....
XI. Post Office	16,86,860	18,54,160	1,67,300	.....
XV. Marine	2,39,743	2,39,896	.....	8,547
XVII. Interest	8,16,116	8,25,025	8,909	.....
XVIII. Receipts in aid of super- annuation, retired, and compassionate allowances.	41,431	71,102	29,671	.....
XIX. Gain by exchange on trans- actions with London.	35,672	30,237	.....	5,435
XX. Miscellaneous... ..	38,703	2,57,864	2,19,163	.....
Total	13,73,26,458	14,32,61,212	59,52,036	14,282
Net Increase ... ..	.....	.....	59,37,754	

The difference between the actuals of 1876-77 as given in last year's report and those entered in the above statement is due *firstly* to the transfer to provincial services of a part of the receipts hitherto classed as imperial, and *secondly* to adjustments made subsequent to the close of the accounts of the year. . . .

The following explanations have been furnished of the principal items of increase and decrease in imperial receipts in 1877-78 as compared with 1876-77.

INCREASE.

Land Revenue, Rs. 2,86,803.—Principally under ordinary revenue, sale of Government estates, and miscellaneous.

Forest, Rs. 2,03,826.—Larger sales of timber, supplies of sleepers for the Northern Bengal State Railway, increased receipts from the extension of the Soonderbun reserve, and greater demand for fire-wood at Darjeeling.

Customs, Rs. 15,87,351.—Chiefly under imports.

Salt, Rs. 9,34,629.—Large clearances from bond consequent on the favourable state of the market.

Opium, Rs. 25,14,402.—The number of chests sold in 1876-77 was 47,240, against 49,500 in 1877-78; and the average selling price per chest in 1876-77 was Rs. 1,270-3, against Rs. 1,266-6-8 in 1877-78.

Interest, Rs. 8,909.—Increase under interest on loans to municipalities, &c., diminished by decrease under interest on advances and loans to Native States or private individuals, and under interest on the unpaid portion of purchase money of waste lands.

Receipts in aid of Supcrannuation, Retired, and Compassionate Allowances, Rs. 29,621.—Larger receipts on account of contributions towards pensions and gratuities by officers lent to municipalities, &c.

Miscellaneous, Rs. 2,19,163.—Increase under unclaimed bills of exchange of more than three years' standing, sale proceeds of Durbar presents, and a write back in account current with London of expenditure charged in 1866-67 for stores supplied.

DECREASE.

Marine, Rs. 8,847.—Smaller receipts under Dockyard services and supplies to private individuals, against increase under sale proceeds of vessels and stores.

Gain by exchange on transactions with London, Rs. 5,435.—Smaller adjustments on account of provincial stores supplied by the Secretary of State.

Statement showing the Imperial Expenditure in 1877-78 as compared 1876-77.

HEADS OF EXPENDITURE.	Actuals, 1876-77.	Actuals, 1877-78.	1877-78.	
			Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.
2. Interest on service funds and other accounts.	1,40,513	1,04,952	.....	35,561
3. Retunds and drawbacks ...	4,30,631	5,15,706	85,075	.....
4. Land revenue	5,68,057	5,92,243	24,186	.....
5. Forest	2,11,690	2,00,965	49,275	.....
8. Salt	1,27,269	1,01,802	.....	25,467
9. Opium	2,83,98,89	2,65,57,094	.....	18,41,195
12. Post Office	23,22,890	23,24,539	1,650	.....
14. Administration	2,52,009	2,40,938	.....	11,071
15. Minor departments	22,915	17,178	.....	5,737
16. Law and Justice	2,72,553	2,79,638	7,285	.....
18. Marine	19,43,615	11,02,396	.....	8,41,249
20. Ecclesiastical	2,25,042	2,24,413	.....	629
21. Medical	3,48,560	3,40,038	.....	8,522
22. Stationery and printing ...	1,67,196	1,73,249	6,053	.....
23. Political Agencies	1,08,211	63,760	.....	44,451
24. Allowances and assignments ...	24,63,653	23,30,592	.....	1,24,061
25. Civil, burlough, and absentee allowances.	5,602	20,365	14,763	.....
26. Supcrannuation, retired, and compassionate allowances.	6,36,797	7,07,549	1,60,752	.....
27. Loss by exchange on transactions with London.	1,269	83	.....	1,186
28. Miscellaneous	38,682	52,303	13,711	.....
Balance of local Govt. increased	.....	33,35,210	33,35,210	.....
Total ...	3,88,85,472	3,94,44,303	36,97,960	29,39,129
Net Increase ...	.....	.....	7,58,831	

The differences between actual figures of 1876-77 given in the last year's report and those shown in the above statement are due to the causes already stated under the head of Receipts.

The following explanations have been furnished of the principal items of increase and decrease in imperial expenditure in 1877-78 as compared with 1876-77.

INCREASE.

Refunds, Rs. 85,075.—Larger refunds of customs' and salt duty, against decrease under Land Revenue, Miscellaneous, and Drawbacks.

Land Revenue, Rs. 24,186.—Increased expenditure under charges on account of Government estates and land settlement charges, against smaller payments under Revenue Survey and Malikana.

Forest, Rs. 49,275.—Chiefly on account of timber operations, partly connected with the supply of sleepers for the Northern Bengal State Railway and of fire-wood for Darjeeling.

Law and Justice, Rs. 7,285.—Larger payments for salaries of Government law officers and a new charge for establishments of Government Pleaders.

Stationery and Printing, Rs. 6,053.—Increase of establishment and office expenses and miscellaneous (chiefly due to the transfer of the Form Store Department) of the Presidency Stationery office, against smaller payments for purchase of stationery in the country.

Civil, Furlough, and Absentee Allowances, Rs. 14,763.—A larger number of officers drew these allowances from Bengal treasuries in 1877-78.

Superannuation, Retired, and Compassionate Allowances, Rs. 1,60,752.—Chiefly due to special payments to Military Officers in civil employ in the North-Western Provinces and the Punjab as bonus on retirement from the service. There is also a slight increase under superannuation allowances and compassionate allowances.

Miscellaneous, Rs. 13,711.—A special payment of Rs. 25,000 for resumption of lime quarries in Sylhet, against smaller payments for remittance of treasure.

Balance of local Government increased, Rs. 33,35,210.—A new head opened in 1877-78 to show the cash balance of the year under provincial services.

DECREASE.

Interest on Service Funds and other accounts, Rs. 35,561.—Adjustment of interest on District Savings Bank deposits not made owing to non-receipt of statement from Comptroller-General.

Salt, Rs. 25,467.—Smaller payments on account of clerks, servants, &c., of the preventive establishment in Behar.

Opium, Rs. 18,41,195.—Smaller payments for cultivation in the Behar Agency.

Administration, Rs. 11,071.—Post of Accountant-General held by an acting officer and reduction of establishment.

Minor Departments, Rs. 5,737.—Due principally to payments for the Bengal Gazetteer having ceased.

Marine, Rs. 8,41,249.—A special adjustment in 1876-77 for the cost of famine vessels.

Medical, Rs. 8,522.—Payments this year were below the average.

Political Agencies, Rs. 41,451.—Special payments last year on account of the Imperial Assemblage at Delhi on the 1st January 1877 and for local rejoicings, against increase under Durbar presents.

Allowances and Assignments, Rs. 1,24,061.—Smaller payments of compensation for salt to the French Government.

MONETARY ARRANGEMENTS.

During the year no addition has been made to the number of banks, which still remain at 45; but there is no district treasury at which there is not a savings bank. The number of depositors rose from 4,513 on 31st March 1877 to 5,251 on 31st March 1878, and the balance at their credit from Rs. 9,69,948 to Rs. 11,21,400, showing an increase, as compared with the previous year, of 738, or about 16 per cent. in the former, and of Rs. 1,51,452, or about 15 per cent., in the latter. The average balance in each bank and at credit of each depositor was Rs. 24,920 and Rs. 213 respectively. In comparison with 1876-77 there has been an increase of Rs. 3,366 in the former and a decrease of one rupee in the latter. The amount of interest passed to depositors was Rs. 37,184, against Rs. 32,161 allowed in 1876-77.

Of the 5,251 accounts, 462 are held by European and Eurasian depositors and the rest by natives of the country. The following is a distribution of the balance and interest among these two classes:—

	1876-77.	1877-78.	Increase.	Decrease.
Number of European and Eurasian depositors ...	453	463	9	.....
Number of Native depositors ...	4,060	4,789	729	.....
	Rs.	Rs.	Rs.	Rs.
Balance at credit of European and Eurasian depositors ...	1,52,012	1,59,263	7,250	.....
Balance at credit of Native depositors ...	8,17,936	8,62,138	1,44,202	.....
Amount of interest allowed to European and Eurasian depositors ...	5,696	5,486	.....	210
Amount of interest allowed to Native depositors ...	26,465	31,698	5,233	.....

The depositors are thus classified according to their profession:—

	1876-77.	1877-78.	Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.
Class I.—Professional—				
Having fixed incomes ...	2,665	3,146	481	.....
Having variable incomes ...	440	511	71	.....
Class II.—Domestic ...	257	291	34	.....
III.—Commercial ...	161	177	16	.....
IV.—Agricultural ...	66	75	9	.....
V.—Industrial ...	32	34	2	.....
VI.—Indefinite or non-productive ...	892	1,017	125	.....

The following table shows the number of accounts and the balance of deposits at the end of each of the past eight years :—

				No. of accounts.	Balance of deposits. Rs.
1870-71	...	...	...	542	67,310
1871-72	...	...	...	1,201	1,82,091
1872-73	...	...	...	1,815	3,26,736
1873-74	...	...	...	2,531	4,90,091
1874-75	...	...	...	3,176	6,66,994
1875-76	...	...	...	3,861	8,53,198
1876-77	...	...	...	4,513	9,69,948
1877-78	...	...	...	5,251	11,21,400

The facts and figures given above indicate that the District Savings Banks have made satisfactory progress during the year.

The total issues during the year under review, as compared with the previous year, were as follow :—

Money-orders.

	Value Rs.
1876-77, orders issued	32,934 17,92,199
1877-78, ditto	33,527 17,38,917

showing an increase of 593 orders and a decrease in the value of Rs. 53,282.

The decrease in the amount of orders issued occurred mainly in Backergunge, Balasore, Bhullooah, and Bogra. In the previous report it was noticed that the increase in the issue of money-orders in the above and some other treasuries was caused by the paucity of currency notes in circulation in those districts; but from the reports received this year it appears that there was a better supply of notes in 1877-78.

Out of 21 offices whose issues exceeded those of the previous year, the drawings of two only call for special remark, viz. Calcutta and Cuttack.

The heavy drawings of Calcutta continued in consequence of famine at Madras; its drawings on Balasore alone being Rs. 2,18,150 from August 1877 to March 1878.

The increase in the issue of money-orders in Cuttack may be to some extent due to the closure of the currency note agency at that place. Exporters of rice from Orissa to Madras were obliged to have recourse to money-orders for remittances to their agents in the neighbouring districts.

The average value of each money-order issued during the year was Rs. 51-8.

In 1873-74 it was Rs. 48-4, in 1874-75 Rs. 54-9, in 1875-76 Rs. 48-8, and in 1876-77 Rs. 54-4.

The increase in the number of drawings and the decrease in the average amount of each money-order would seem to indicate that money-orders are now being largely used for the purpose originally intended, namely, for the safe remittance by the public of small sums of money.

In connection with this subject it is worthy of note that the revenue from the sale of hoondi stamps increased by more than 25 per cent. during 1877-78.

The payments were as follow :—

			Value Rs.
1876-77, orders paid,	54,248	...	27,80,105
1877-78, ditto,	51,832	...	23,04,005

showing a decrease of 2,416 orders to the value of Rs. 4,76 100.

The total amount of commission realized during the year was Rs. 19,210, against Rs. 19,714 in 1876-77.

The opening balance on 1st April 1877 at the mofussil treasuries amounted to Rs. 41,86,155. The very large amount of this balance on 1st April is due to the fact that a heavy instalment of land revenue falls due in the end of March, and that a large portion of it is paid in notes. The value of notes received during the year 1877-78 was 369 lakhs, and that of the notes issued during the same period was 155 lakhs.

The transactions in notes at the mofussil treasuries during 1877-78 and two previous years were—

RECEIPTS.				1875-76.	1876-77.	1877-78.
				Rs.	Rs.	Rs.
In payment of dues	...	...	...	1,59,56,310	1,69,27,590	2,27,42,415
„ exchange for silver	...	...	...	95,53,530	1,02,88,295	1,41,92,440
„ „ „ notes	...	...	...	4,23,920	30,500	5,33,410
Total				2,59,33,760	2,75,21,180	3,74,08,265
ISSUES.						
In payment of dues	...	...	...	93,53,000	79,62,890	93,85,540
„ exchange for silver	...	...	...	1,21,99,100	70,19,690	61,44,015
„ „ „ notes	...	...	...	4,23,920	3,05,300	5,33,410
Total				2,27,76,020	1,52,87,880	1,60,62,965

The receipts show an increase of nearly one hundred lakhs over those of the preceding year, and the increase is under all the descriptions, viz. in payment of dues, in exchange for silver, and in exchange for notes of other values. In no one year during the last decade have the receipts reached so high a figure as in the year under report. This result is, no doubt, due to the greater activity of trade during 1877-78. The heavy exports from Bengal rendered necessary large remittances to mofussil districts, and these remittances were as far as possible made in notes. There has been also an increase of about eight lakhs in the issue, notwithstanding the restricted supply of notes to treasuries.

The note receipts were 24 per cent. of total receipts of cash and notes, and the note payments were 14 per cent. of the total payments of cash and notes. The percentage of the note receipts and payments

of some of the important treasuries as compared with their total receipts and payments is given below:—

	Receipts.	Issues.
Backergunge	23.22	12.83
Balasore	23.006	6.98
Beerbhoom	25.64	22.83
Bhagulpore	34.42	28.18
Burdwan	29.58	28.1
Calcutta	68.16	3.82
Chittagong	23.5	4.1
Chumparun	35.33	1.72
Darjeeling	32.23	9.87
Dinagepore	31.46	12.68
Durbhunga	21.68	12.51
Gya	25.25	3.09
Hughli	46.1	32.26
Maldah	23.86	27.88
Moorsshedabad	35.54	14.05
Mozufferpore	28.57	20.08
Nuddea	31.49	38.03
Pubna	21.05	23.24
Purneah	41.6	37.04
Rajshahye	23.23	18.85
Singbhoom	20.34	9.8
24 Pargunnahs	43.21	35.89

The total cash balance of the Bengal treasuries on 31st March 1878 was Rs. 2,33,03,230, and of this Rs. 46,96,305 were held in notes. The cash balance is generally much larger on this date than at any other time. This is due to the heavy payments of revenue which are made in March.

Provincial and Local Finance.

THE review of Provincial Finance contained in the report for 1876-77 shewed the importance which the financial administration of the province has assumed in consequence of the transfer to provincial control and management of several large and important branches of revenue and expenditure. These transfers took effect from the commencement of 1877-78. The accounts of the year opened with the following credit balances:—

			Rs.
Provincial Services	...	...	2,87,265
„ Reserve Fund	...	...	5,62,130
		Total	8,49,395

The estimates for 1877-78 given in the report were prepared before the actual closing balances of the preceding year were known, and no provision was made for the contribution to be paid on account of extraordinary public works, and no credit was taken for receipts from the provincial public works cess. In those estimates it was assumed that under Provincial Services there would be a closing credit balance at the end of 1877-78 of Rs. 11,190, and under Provincial Reserve Fund of Rs. 2,90,246, or a total under the two heads of Rs. 3,01,445. This result was obtained by taking credit on the receipt side of Provincial Services for a sum of Rs. 5,90,000 in excess of the original estimate of stamp receipts on account of operations under the Land Registration Act VII (B.C.) of 1878. Had it not been for this, the estimate under Provincial Services would have closed with a debit balance of Rs. 5,53,141, the balance under Provincial Reserve remaining as before.

The year 1877-78 has, however, proved to be one of great financial prosperity. The following statement shows approximately the accounts of the year.

PROVINCIAL SERVICES.

RECEIPTS.			CHARGES.		
MAJOR HEADS.	Rs.	Rs.	MAJOR HEADS.	Rs.	Rs.
1. Land Revenue ...	1,00,874		1. Interest on debt ...	20,00,000	
4. Excise ...	68,67,888		3. Refunds and draw-backs ...	6,31,728	
6. Provincial ...	21,05,038		4. Land revenue ...	21,37,144	
7. Customs ...	75,029		5. Forests ...	1,058	
8. Salt ...	2,72,400		6. Excise ...	3,05,829	
10. Stamps ...	1,08,14,517		8. Provincial rates ...	10,270	
14. Law and justice ...	21,55,018		9. Customs ...	7,15,792	
15. Police ...	91,910		10. Salt ...	40,161	
16. Marine ...	14,57,423		11. Stamps ...	3,34,323	
17. Education ...	5,19,604		12. Administration ...	13,22,497	
21. Miscellaneous ...	11,20,141		17. Minor Departments ...	2,61,604	
23. Public Works ordinary ...	1,01,571		18. Law and Justice ...	81,83,723	
24. Canals ...	4,94,772		19. Police ...	41,87,542	
26. State Railways ...	7,50,183		20. Marine ...	12,72,025	
			21. Education ...	25,24,091	
			22. Ecclesiastical ...	7,786	
			23. Medical ...	13,87,121	
			24. Stationery and printing ...	7,74,443	
			25. Central stores ...	3,19,472	
			30. Miscellaneous ...	25,72,043	
			33. Public Works ordinary ...	7,02,057	
Imperial allotment...	.....	2,60,58,583	34. Canals ...	5,87,942	
		43,54,800	36. State Railways ...		
Total	.....	3,17,93,183	Closing balance ...	.....	3,08,81,451
Opening balance ...	.....	2,88,463			12,00,195
Grand Total ...	.....	3,20,81,646	Total ...	.....	3,20,81,646

PROVINCIAL RESERVE FUND.

RECEIPTS.			CHARGES.		
DETAILS OF FUNDS.	Rs.	Rs.	DETAILS OF FUNDS.	Rs.	Rs.
Pound Fund ...	3,19,831		Pound Fund ...	1,31,336	
Police Clothing Fund ...	1,31,544		Police Clothing Fund ...	1,33,129	
Circuit-house Fund ...	6,432		Circuit-house Fund ...	6,900	
Pledership Examination Fund ...	15,077		Pledership Examination Fund ...	4,264	
Ferry Fund ...	1,98,782		Ferry Fund ...	5,190	
Steam-boilers Fund ...	10,535		Steam-boilers Fund ...	10,335	
Local Public Works—			Local Public Works—		
Canal tolls ...	4,41,208		Canal tolls ...	2,00,785	
River ...	3,24,910		River ...	95,224	
Ferry ...	60,657		Ferry ...	16,287	
Road ...	19,155		Road ...	6,011	
Staging bungalow ...	13,916		Staging bungalow ...	19,747	
Strand Bank ...	61,595		Strand Bank ...	49,265	
Amalgamated District Road Fund ...	2,066		Amalgamated District Road Fund ...	2,003	
			Contributions ...	30,824	
			Surplus balance of Chowkidari and Municipal Fund ...	4,195	
					16,157
Opening balance ...	.....	16,05,737	Closing balance ...	.....	1,51,711
		6,62,131			
Total ...	.....	21,67,868	Total ...	.....	21,67,868

The balance at close of the year under Provincial Services was Rs. 12,00,195, and under Provincial Reserve Rs. 14,51,711, making together a balance at the end of 1877-78 of Rs. 26,90,950. It will be seen that in the account for 1877-78 the receipts and charges of the Provincial Reserve Fund have been shown separately as usual, but the

closing balance has been written off and credited to Provincial Revenues. This transaction is the result of the acceptance by the supreme Government of a proposal to amalgamate with the service heads all the receipts and charges of the several funds which hitherto were grouped under the head of Provincial Reserve Fund. Under this arrangement the Provincial Reserve Fund ceases to exist as a separate fund.

The estimates of 1878-79 were framed in accordance with the recent orders of the Government of India prescribing revised forms for the preparation and submission of estimates and accounts. One of the most important changes in the form of the estimates was the amalgamation of the provincial reserve fund figures with those of provincial services, as explained above. In addition to this change the Government of India prescribed other material modifications in the form and matter of estimates, which it was incumbent on the provincial Government to follow. In order to explain the effect of these changes it may be convenient to recapitulate briefly the various classes of estimates and accounts with which the provincial Government has hitherto had to deal. There were, *first*, the estimates and accounts of *Imperial Services*, that is to say, of those branches of revenue and expenditure which had not been made over to provincial control and management. In its relation to these services the local Government is in the same position now as that it held before the introduction of the provincial Services scheme in 1871-72. *Secondly*, there were the estimates and accounts of *Provincial Services*, or of those branches of revenue and expenditure, originally imperial, made over to the management of the local Government under the present system of provincial contracts. *Thirdly*, there were the estimates and accounts of the funds constituting the *Provincial Reserve*, that is, of those local funds the balances of which are at the disposal of the Local Government for provincial purposes. *Fourthly*, there were the estimates and accounts of those *Local Funds* (properly so called) which are by law or by their constitution devoted to particular local and limited objects. The amount of control which may be exercised over these by Government varies considerably, and may be said to be at a minimum in the case of the District Road Fund and at a maximum in the case of the Port Funds. Both these strictly local funds and those hitherto included under the Provincial Reserve may be divided, with reference to their origin, into two classes: thus—

(I)—Funds supported by compulsory rating, or by payments under sanction of law, or orders having the force of law.

(II)—Funds made up of payments which are of the nature of rents, tolls, or fees for services or facilities rendered or privileges conferred.

Lastly, there were the accounts and estimates of *Municipal Funds*. These, though strictly speaking local funds, were not dealt with in the Local Funds Budget of this Government, under which only the funds of the *fourth* class were treated together.

The Government of India directed that the transactions of the local Government, under the heading of "Provincial Services," should be reincorporated in the general estimates and accounts. The effect of this order was to amalgamate, for the purposes of the imperial

budget, the *first* and *second* classes of accounts and estimates described above. The estimates and accounts of Provincial Services were also reincorporated with "those resources recorded under 'Local Funds' which were at the free disposal of the local Government for expenditure in any part of its jurisdiction without legal let or hindrance." The effect of this was to incorporate with the estimates of Provincial Services, and therefore with the imperial estimates, the transactions of the funds treated in Bengal as Provincial Reserve (*i.e.* the *third* class above described).

It was also directed that the estimates and accounts of the transactions of *Local Funds* should in future be "confined to moneys which are not the property of the Government at all, or the appropriation of which is regulated by special laws and limited to territorial units within the provincial jurisdiction or to some specific objects."

The local funds which have under these orders been incorporated in the general estimates are the following:—

- (1) District Road Fund.
- (2) District Road Account.
- (3) Zemindari Dāk Fund.
- (4) Fund for the Management of Wards' Estates.
- (5) Government Estates' Improvement Fund.
- (6) Inland Labour Transport Fund.
- (7) Zoological Garden Fund.
- (8) Salt Reward Fund.
- (9) Encamping-ground Grazing Fund.

The funds which still remain 'local' are—

- (10) The Cantonment Fund.
- (11) Pooree Pilgrim Fund.
- (12) Juggernath Road Fund.
- (13) Town Improvement Fund.
- (14) The various minor Port Funds.
- (15) Hospital Port Dues* Fund.

Municipal Funds, which, however, represent a very considerable item of taxation, do not anywhere appear in the accounts.

All the receipts of the incorporated local funds, together with those hitherto classed as Provincial Reserve* (and enumerated on the margin), were shown, along with the Provincial Public Works* Cess, under the heading of "Provincial Rates."

Pound fees.	Examin-
Pledership	ation
fees.	fees.
Circuit-house rents.	
Steam-boiler	Inspection
fees.	
Ferry tolls.	
Road tolls.	
Canal tolls.	
River tolls.	
Strand Bank rents.	
Staging-bungalow	re-
ceipts.	

The revised forms of estimates and account are required by the Government of India for the preparation of consolidated statements for the whole of the Indian empire, but for present purposes it will be more convenient to deal separately with provincial finances as distinguished from local finance. In this view the following statement will show the estimated receipts and charges under the various major heads for 1878-79.

RECEIPTS.		CHARGES.	
	Rs.		Rs.
1. Land revenue	86,000	1. Interest on debt	31,99,000
4. Excise	69,00,000	2. Famine insurance	21,15,000
5. Assessed taxes	25,50,000	3. Refunds and drawbacks	5,57,000
6. Provincial rates	50,82,000	4. Land revenue	25,31,000
7. Customs	58,000	5. Forests	1,000
8. Salt	2,31,000	6. Excise	3,26,000
10. Stamps	1,01,50,000	7. Assessed taxes	2,35,000
14. Law and justice	22,67,000	8. Provincial rates	50,000
15. Police	79,000	9. Customs	6,79,000
16. Marine	10,87,000	12. Stamps	60,000
17. Education	5,29,000	16. Administration	2,45,000
21. Miscellaneous	10,65,000	17. Minor departments	13,15,000
23. Public Works, ordinary	61,000	18. Law and justice	85,44,000
24. Canals	9,67,000	19. Police	33,08,000
25. State Railways... ..	16,18,000	20. Marine	11,17,000
	3,25,31,000	21. Education	26,72,000
Imperial allotment	46,06,000	22. Ecclesiastical	9,000
	3,71,37,000	23. Medical	12,07,000
Opening balance	28,54,000	24. Stationery and printing	1,87,000
		Ditto from Central stores	5,15,000
		30. Miscellaneous	2,06,000
		33. Public Works, ordinary	54,84,000
		34. Canals	6,74,000
		35. State Railways	11,27,000
		Total	3,74,94,000
		Closing balance	25,97,000
Grand Total	3,99,91,000	Grand Total	3,99,91,000

The following review explains briefly the chief facts affecting this estimate.

The receipts are estimated at Rs. 86,000. They show an increase in consequence of the operations under the Land Registration Act.

The expenditure has been taken at Rs. 25,31,000, including a grant of Rs. 1,40,000 made by the Government of India on account of management of Government estates transferred to provincial control. The expenditure under this head chiefly consists of salaries of permanent establishments, and remains on the whole tolerably constant, with, however, a tendency to increase.

The receipts are estimated at Rs. 69,00,000. If the year 1878-79 is fairly prosperous, there is no reason to doubt that this figure will easily be reached. It may very possibly be exceeded. The local Government and the Board of Revenue are devoting much attention to the improvement of the excise system in these provinces. There is strong reason to believe that there has been a large consumption of illicit liquor in some districts, and that the revenue has been systematically defrauded, and in some instances locally mismanaged. It is the object of Government to enhance the revenue in a legitimate way by substituting licit for illicit consumption; while, by raising the duties on drugs, it discourages the growing use of those deleterious articles that have a tendency to take the place of the more wholesome weak spirit of the country wherever the procuring of this is made exceptionally difficult.

The receipts under the License Tax Act are shown under this head; the Government has no present means of estimating them accurately. The estimate adopted is in

Assessed taxes.

the main a conjectural one, though based to some extent upon the recorded results of the License Tax of 1867 and the Certificate Tax of 1868. It is assumed that the receipts under the Act may amount to Rs. 23,50,000, and a similar sum, less Rs. 2,35,000 on account of cost of collection, is shown as expenditure on famine insurance on the other side of the estimate.

Under this head is entered a sum of Rs. 34,50,000, the estimated receipts from the Public Works Cess in 1878-79, and Rs. 16,32,000, receipts from funds formerly classified as reserve; together aggregating Rs. 50,82,000.

On the expenditure side of the estimates the first heading is that of interest on debt, representing the gross interest charge for the year upon the capital expended on reproductive works, for which the Provincial Government is responsible. This is taken to be Rs. 31,99,000. The actual amount which the local Government has to make good is the gross interest less the net traffic receipts, and this will amount in 1878-79 to about Rs. 24,15,000. This sum will be met from the Public Works Cess collections, the balance of which will then be available for other works within the province. The cost of establishment, for collecting the Public Works Cess, Rs. 50,000, is shown under this head.

The receipts and charges under this head, so far as they are provincial, call for no special remark. The local Government receives certain small items of revenue, and a further grant to enable it to meet the charges of the establishments of the various custom houses in the province.

The provincial receipts from salt consist only of warehouse rents and a few minor items of fees and fines made over by the Government of India in March 1877. To this revenue has been added the receipts of the *Salt Reward Fund*, which were hitherto entered in the Local Funds Budget. These will amount to Rs. 8,300 in 1878-79.

The expenditure has been estimated at Rs. 60,000. This increase over previous years is rendered necessary by the cost of the preventive establishment at Pooree (about Rs. 13,000), which is, under recent orders of the Government of India, to be borne by the Government instead of by the manufacturers, as heretofore. An application was made to the Government of India to increase the provincial assignment to the extent of the extra charge thus thrown on the local Government; but His Excellency the Governor-General in Council has decided that this shall be postponed until it is certain what the actual charge is likely in future to be. Meantime the provincial Government will defray the cost, looking to the supreme Government to indemnify it hereafter. The charges of the *Salt Reward Fund* have also for the first time been shown under this head, and have helped to swell the figures of expenditure.

The receipts under this head have been estimated at Rs. 1,01,50,000.

Under this head, taken together with law and justice, the imperial Government expects a normal growth of revenue of two and three-quarter lakhs per annum for the next four years. The receipts of the year 1877-78 were

from exceptional causes largely in excess of the amount which this Government was bound to make good to the Government of India in 1877-78, viz. Rs. 98,50,000. But it was the opinion of the Board of Revenue and of the local officers that the receipts of 1878-79 under Stamps are not likely to exceed Rs. 97,34,000, while the sum this Government has to make good to the Government of India is Rs. 1,01,00,000. It appeared, however, that the local estimates might safely be somewhat raised; and in consideration of the general prosperity of the country and the promising state of the winter crops, and in the expectation that the new Stamp Bill would shortly become law, the estimate was raised to Rs. 1,01,50,000. The demand of the supreme Government for two and three-quarter lakhs of rupees annual increment in the receipts under 'Stamps' and 'Law and Justice' is likely to prove a serious charge upon the general resources of the local Government for the next few years. The share of the increment expected from 'Law and Justice' was Rs. 25,000. It has not been found possible to estimate for this in 1878-79.

Under the orders of the Government of India for amalgamating the provincial with the imperial financial accounts the receipts and charges of '*Jails*' and '*Registration*' fall now under "Law and Justice." For convenience of comparison, however, they may here be separately referred to.

Under *Jails* the receipts have been estimated at Rs. 7,34,000, and the expenditure has been estimated at Rs. 15,55,000.

Compared with figures of previous years, the estimated expenditure under jails shows a decrease in 1878-79. But the Lieutenant-Governor has made a grant of Rs. 2,30,000 under Public Works for jail buildings, which in several districts are still in a very disreputable state.

The receipts under *Registration* have been estimated at Rs. 8,00,000. The new table of fees under the Registration Act is expected to raise the receipts by about 25 per cent., and the steady and regular expansion of registration is not likely to be checked save by some serious and general calamity. The expenditure of the department has been at the same time reduced by a careful revision of establishments and regulation of their rate of payment.

The gross revenue under "Law and Justice" is estimated at Rs. 22,67,000.

The expenditure under "Administration" and "Law and Justice"

Administration.

proper consists mainly of salaries and payments to fixed establishments, which are not susceptible of reduction, but rather, as in the case of land revenue charges, show a constant tendency to increase. It is in contemplation to undertake a general scrutiny and revision of ministerial judicial establishments, which may possibly effect some savings. But there can be no doubt that the Government must be prepared very shortly to meet a large increase in the number of moonsiffs, as well as the cost of the system of appellate benches, now under reference to the Secretary of State.

Marine.

The receipts under this head have been estimated at Rs. 10,87,000, against the grant made by the Government of India under this head of Rs. 10,84,000. The accounts for 1877-78 show increased receipts during the current year,

which are attributable to the great development of the trade in grain during the pressure of the late famine in Madras and Bombay, and the consequent remarkable influx of vessels to the port; but the Government did not feel justified in anticipating a recurrence of these exceptional circumstances in 1878-79.

The receipts under this head are estimated at Rs. 5,29,000. It may be noted that since the inauguration of the Education. scheme of provincial finance the receipts under this head have greatly increased: thus—

		Rs.				Rs.	
BENGAL AND ASSAM.	{ 1871-72	...	3,90,000	1875-76	...	...	4,95,287
	{ 1872-73	...	3,00,007	1876-77	...	...	4,75,227
	{ 1873-74	...	4,78,540	1877-78	...	...	5,24,091
	{ 1874-75	...	5,02,363	1878-79 (estimate)	...	...	5,29,000

As educational receipts consist chiefly of college and school fees, the fact of their steady increase is particularly satisfactory.

The expenditure has been estimated at Rs. 25,72,000. Provision has been made in the estimates for the introduction of the graded scheme of teachers' salaries, and for the maintenance and gradual extension of the Government Art Gallery.

Under this head are included receipts from sale of old stores, unclaimed deposits, medical, printing, and various Miscellaneous. other sources. The gross receipts are estimated for 1878-79 at Rs. 10,66,000.

The receipts under *Medical* are estimated at Rs. 1,44,000. There is a slight decrease in the estimated receipts of the coming year, attributable chiefly to the substitution of the cheap cinchona febrifuge for quinine in sales to the public, &c. In both 1876-77 and 1877-78 the great influx of shipping into the port of Calcutta gave an abnormal development to the fees from paying patients in Government hospitals and asylums, and it is improbable that any decrease will be shown in 1878-79, as better arrangements have been made for the recovery of these fees. The general question of enforcing payment from well-to-do patients in Government hospitals is now under consideration. The expenditure is estimated at Rs. 12,07,000. There has been a large and serious increase in this class of expenditure since 1871-72, into the causes of which close and detailed inquiry has been ordered. The grant for 1878-79 is reduced, in the expectation that the Committee now investigating the subject will secure very shortly savings in hospital and dispensary outlay.

The receipts from *Printing* are estimated at Rs. 52,000. The expenditure has been estimated at Rs. 1,85,000. The large decrease is due to radical changes made in the organization of the Printing Department, which are expected to result in savings to the extent of one lakh of rupees. In future all heavy printing work will be executed at the Presidency Jail, which is being converted into a large Government printing and book-binding establishment. At the Secretariat Press only the current printing work of the office will be carried on.

Public Works ordinary. Public Works receipts are estimated by that department at Rs. 61,000.

The largest head of expenditure is the Public Works ordinary, the total grant for which in 1878-79 is Rs. 54,84,000, thus made up—

	Rs.
Original normal grant for Public Works ...	24,90,000
Additional grant (explained below) ...	20,00,000
Expenditure formerly debited to Reserve Funds ...	9,14,000
Grant for railway surveys ...	80,000
Total ...	<u>54,84,000</u>

The grant originally made to the Public Works Department for 1878-79, on which its detailed Provincial estimates were to be prepared, was Rs. 24,90,000 only. When, however, it was obvious that the financial position of the province was a safe and flourishing one, and in view of the favourable estimate of the receipts for 1878-79, it was decided to make a large addition to the Public Works expenditure, and to carry out various important and useful schemes that had been left in abeyance for want of funds.

On the inauguration of the scheme of Provincial Finance in 1871-72 the grant made by the Government of India for Provincial Public Works was about 26 lakhs of rupees. In the first year of the Provincial scheme Sir G. Campbell allowed the Public Works Department to expend only a little more than this grant; but in the next year (1872-73), as he had by saving elsewhere secured a large surplus, large special grants were given for roads and communications and the general improvement of the province, and the expenditure rose to nearly 35½ lakhs. In October 1873 came the first alarm of scarcity, and during the next two years—that is, up to the end of 1874-75—the resources of the Provincial Public Works Department were devoted almost entirely to relief works in the distressed districts. When the famine was over, the local Government found its balances completely exhausted. In April 1876 the Lieutenant-Governor (Sir Richard Temple) expressed his conviction that there was no probability that the annual grant for Provincial Public Works could for some years to come exceed 25 lakhs of rupees. In accordance with this principle the grants for Provincial Public Works for 1876-77, 1877-78, and 1878-79 were fixed.

It has now been found possible to make the following grants for important public works in 1878-79 :—

	Grant. Rs.
Concentration of the Government offices in Writers' Buildings (postponed in 1875-76) ...	3,50,000
Improvements in the Medical College Hospital (estimated at six lakhs of rupees, half of which will be found by the Government of India) ...	3,00,000
Public Works Practical Training Institution ...	2,60,000
Jail buildings ...	2,30,000
Court-houses at Durbhunga and Motiharee ...	2,10,000
Assam Emigration Road ...	1,50,000
Other Provincial roads and minor works ...	1,50,000
Improving navigable channels between Balasore and Pooree ...	50,000
Total ...	<u>17,00,000</u>

The sum of Rs. 9,14,000 was devoted to works of which the cost had previously been met from the Provincial Reserve Funds. Of this Rs. 7,73,000 are to be devoted to improving, enlarging, and locking the Calcutta Canals. A sum of Rs. 80,000 was provided on account of preliminary outlay on railway surveys. This will be charged eventually to the capital cost of the lines if sanctioned.

The gross receipts of the *Sone* and *Orissa Canals* were estimated at Rs. 9,67,000 for 1878-79, showing a large and satisfactory advance, attributable to the readiness with which landowners and others are now coming forward to take the water.

From State Railways an income was expected of Rs. 16,18,000.

The grants for the working expenses of Canals and State Railways are Rs. 6,74,000 and Rs. 11,27,000 respectively.

The general effect of the estimates upon provincial balances may be briefly summarized thus:—

				Rs.
Opening balance, 1878-79	...	...	...	26,90,195
Receipts	...	...	...	3,71,37,000
		Total	...	3,98,27,195
Charges	...	...	...	3,73,94,000
Estimated closing balance, 1878-79	...	...	...	24,33,195

It is considered that the Government of Bengal should ordinarily maintain a credit balance under provincial funds of not less than 20 lakhs of rupees, to enable it to meet the vicissitudes of bad years without being driven to put a sudden and disastrous stop to all works of improvement. On this principle the estimates for 1878-79 were framed.

LOCAL FINANCE.

There have been no changes in the condition of the local finances of Bengal during the year 1877-78.

The accounts of some of the local funds have been ordered to be incorporated in the general estimates and accounts required by the Government of India; but to convey a precise notion of the state of the finances of the Government of Bengal, the figures for local funds have in this review been kept separate from the accounts of Provincial Finance, the money under which head is entirely at the disposal of the Bengal Government for general administrative purposes, whereas the receipts and surplus balances under local finances are restricted to certain specific purposes.

In regard to the figures for 1877-78, it was explained in last year's report that certain funds which had appeared in the previous year's accounts did not reappear because their receipts and charges had been transferred to other heads of account. The only point in the accounts of 1877-78 which requires special notice is the increase under District Road Fund on both the receipt and the charge sides. This increase is due to the extension of the Road Cess Act during the year to districts in which it was not in operation in the previous year.

This fund represents the aggregate receipts and charges of the district funds created by Act X (B.C.) of 1871. District Road Fund. The receipts for 1878-79 are estimated at Rs. 28,98,000, against Rs. 34,00,098 in 1877-78. The decrease is owing to the fact that receipts from ferries are now credited to Provincial Services. Attention has been drawn to the large balances to credit of this fund, and to the necessity of steps being taken to ensure that district committees utilise fully the funds they raise.

This fund is maintained to show the receipts and charges on account of the construction and repairs of roads in the three districts of Bengal to which the Road Cess Act has not been extended. District Road Account. The receipts and charges for 1878-79 show smaller figures than those for the year 1877-78, but this is due to the extension of the Road Cess Act to certain districts during the course of the year under review. As soon as the Act is extended to a district, the District Road Account is merged in the District Road Fund.

From the balance to the credit of this fund at the close of 1877-78 the sum of two lakhs of rupees was assigned to the Public Works Department for carrying on the Assam emigration road from Rungpore to Dhoobree, and for providing rest-houses and accommodation for the emigrants to the tea districts who will follow this route. In consideration of the flourishing condition of this fund, it has also been arranged that the cost of the protective establishments in Assam, amounting to Rs. 10,248 per annum, shall be debited to it instead of to Imperial Funds. Inland Labour Transport Fund.

The estimates of receipts and charges for 1878-79 have been transferred to Provincial Services under the major head 'Salt,' to which they more properly belong. Salt Reward Fund. The accumulated balances have similarly been transferred, and will be absorbed in the general provincial balance. This fund therefore disappeared from the accounts and estimates of local funds from the beginning of 1878-79.

This fund exists only in the towns of Pooree and Goalundo, and the question is under consideration whether the receipts and charges of the fund should be transferred to the municipal account, or should continue to be shown maintained in a separate fund. Town Improvement Fund.

From the balance to credit of this fund at the close of 1877-78, the Lieutenant-Governor has granted Rs. 50,000 for hospital improvements. Hospital Port Dues Fund.

This is the first time that this fund appears in the estimates of local funds. The estimates for 1878-79 show a small deficit balance at the end of the year of Rs. 300. This arises from the addition by the Accountant-General of a small sum for general management to the estimates sanctioned by the Government. The attention of the Zoological Committee has been called to the deficit in order that steps may be taken to prevent any actual deficit in the accounts of the year.

This fund has hitherto been classified under Provincial Reserve, but in future it will appear as a purely local fund, and its receipts and charges will be treated under the head of local funds.

This is an obsolete fund. The Accountant-General was directed to write off its surplus balance of Rs. 9,346 to the credit of the Provincial Reserve Fund, and thus to close the fund entirely. But on examination it was found that a portion of the balance, amounting to Rs. 2,325, properly belonged to the Police Clothing Fund. The error has been corrected in the accounts of 1877-78, and the balance, Rs. 7,021, has been transferred to Assam, to which province they properly belong.

TRUST FUNDS.

The following statement shows receipts and charges of Trust Funds in Bengal during 1877-78, compared with the figures for 1876-77 and the estimates for 1878-79:—

			Actuals, 1876-77.	Actuals, 1877-78.	Estimates 1878-79.
			Rs.	Rs.	Rs.
Opening balance			53,253	61,631	76,439
Receipts	...		1,53,858	1,02,534	81,300
		Total	2,10,111	1,64,165	1,57,739
Charges	...	..	1,48,480	87,726	75,000
		Closing balance	61,631	76,439	82,739

Of the above funds there are 27 funds, called Educational Trust Funds, the proceeds of which are devoted to the advancement of education in Bengal. It is, however, understood that there are other such funds in charge of departmental authorities, the accounts of which are not shown in the Government books. The question of dealing with these funds in a more regular and systematic manner is still under the consideration of Government.

ROAD CESS.

The Road Cess Act is in force in forty out of the forty-three districts in Bengal. For special reasons it has not been extended to the remaining three districts—the Chittagong Hill Tracts, the Sonthal Pergunnahs, and Singhbhum. In three other districts, namely, Darjeeling, Chittagong, and Lohardugga, the cess was not levied. In the first two districts the valuations had not been completed when the year closed, and from Lohardugga the first return received was for the quarter ending 31st December 1877. The statements received from the Board of Revenue contain figures for the remaining thirty-seven

districts. The valuations in the districts of Darjeeling and Chittagong have since been completed. The following table gives the result of the valuations of these districts, as well as of the districts of Midnapore, Rungpore, and Noakholly, the particulars regarding which were not available at the time the report for 1876-77 was drawn up:—

I.—Statement of the Valuation of Land [Part II of the District Road Cess Act, X (B.C.) of 1871].

DISTRICTS.	Number of estates valued.		Number of tenures valued.		Total.		Valuations made.		Revenue of district.	Number of times by which the valuation exceeds the revenue.
	Over Rs. 100 revenue.	Rs. 100 and less revenue.	Over Rs. 100 rent.	Rs. 100 and less rent.	Estates.	Tenures.	Value of estates.	Value of tenures.		
							Rs.	Rs.	Rs.	
Midnapore	1,798	4,149	2,394	42,947	5,947	45,341	57,26,011	26,15,956	22,68,877	25
Rungpore	627	1,261	3,347	4,588	1,888	47,935	46,41,644	28,68,025	9,44,251	46
Darjeeling	173	862	44	28	1,036	72	5,29,103	14,809	77,643	68
Chittagong	948	78,313	677	79,188	79,202	79,465	30,32,345	17,91,886	6,71,031	45
Noakholly	379	1,735	1,937	101,953	2,114	103,890	29,26,536	26,93,464	4,00,478	63
Total	3,926	86,321	8,399	268,704	90,247	277,103	1,08,55,699	99,84,739	44,62,280	37

The following table shows the result of the house assessment in the five districts above mentioned:—

II.—Statement showing the Result of House Assessment [Part IV of the District Road Cess Act, X (B.C.) of 1871].

DISTRICTS.					Number of assessors' circles of panchayets	Estimated number of villages liable to assessment.	Number of villages assessed.	Amount of assessment calculated at the rate fixed by Schedule B of the District Road Cess Act.
Midnapore ... ..	...	...	...	...	5	924	692	16,150
Rungpore ... ..	...	...	...	...	7	4,206	1,460	12,801
Darjeeling ... ..	...	...	...	...	4	27	27	180
Chittagong ... ..	...	...	...	...	236	320	67	423
Noakholly ... ..	...	...	...	...	3	432	225	1,375
Total ... ..	...	...	...	...	255	5,909	2,461	21,739

The rate of cess was not the same in all the districts. In Burdwan and Rajshahye it was three-fourths of the maximum rate fixed by law. In seven districts—Patna, Gya, Mozufferpore, Durbhunga, Sarun, Pooree, and Balasore—it was half. In the remaining twenty-eight districts the full or maximum rate of half an anna in the rupee was levied.

Collections were made for the first time during the year under review in eleven districts, viz. Midnapore, Rungpore, Pubna, Backergunge, Noakholly, Patna, Gya, Shahabad, Mozufferpore, Durbhunga, and Sarun.

The following table shows the demands, collections, and arrears of road cess on lands and mines for the cess year 1876-77:—

III.—Statement of Demands, Collections, and Arrears of Road Cess on Lands and Mines for the cess year 1876-77.

DISTRICT.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Arrears of 1876-76.	Arrears recovered during 1876-77.	Balance at the end of 1876-77.	Demand for 1876-77.	Collections of 1876-77.	Arrears of 1876-77.	Total arrears, columns 4 and 7.	Remissions.	Net arrears.	Collections on account of next cess year.	Collections out of the arrears made during the quarter ending 31st December 1877.	Percentage of current collections (column 6) on current demand (column 5).	Collections up to 30th September 1877 on demand for December 1877 on column 4 on column 5 + column 6 on column 8.	Collections up to 30th September 1877 on demand for December 1877 on column 4 on column 5 + column 6 on column 8.	Collections up to 30th September 1877 on demand for December 1877 on column 4 on column 5 + column 6 on column 8.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.			
Burdwan	6,367	4,402	1,875	1,46,897	1,01,207	5,490	7,305	610	6,755	412	1,576	945	993	233	
Bankora	2,403	2,261	144	18,459	16,629	1,838	1,977	6	1,971	204	1,444	90	975	742	
Beerbhoom	7,650	7,048	1	49,701	39,629	1,008	1,004	1	1,003	136	842	875	896	849	
Midnapore ... ..	.....	.....	.....	1,52,150	1,22,632	29,518	29,518	.....	.....	1,213	18,336	8939	896	468	
Hoochly	6,713	6,625	88	1,06,346	1,00,603	5,743	5,391	16	5,315	1,365	2,156	8438	897	3707	
24-Pergunnahs ...	11,414	10,069	1,344	1,07,698	1,02,720	4,978	6,822	697	5,625	2,056	3,118	894	873	554	
Nudda	2,576	2,726	150	71,554	69,430	1,921	2,074	13	2,061	1,066	1,198	9730	958	581	
Jessore	7,842	7,759	83	1,02,287	92,496	9,797	9,830	.....	9,890	1,372	7,733	904	9905	782	
Moorsheadabad ...	7,322	6,650	672	78,498	73,824	4,674	5,346	973	4,573	490	3,356	9404	967	593	
Dumapore	11,977	8,732	1,555	70,789	51,530	16,459	18,014	.....	18,014	411	6,906	767	899	514	
Rajshahye	10,009	9,463	546	54,670	51,304	3,366	3,912	.....	3,912	733	599	893	944	76	
Rungpore ... ..	.....	.....	.....	1,22,457	1,04,516	17,541	17,541	.....	17,541	1,162	4,331	866	893	258	
Bogra	4,720	4,643	77	41,667	36,671	5,026	5,108	.....	5,103	16	2,345	879	895	469	
Pubna ... ..	.....	.....	.....	46,342	39,432	6,910	6,910	.....	6,910	1,209	2,142	8908	897	309	
Julpigoree ... ..	.....	.....	.....	31,294	31,011	283	283	.....	283	46	.....	.....	.....	.....
Dacca	2,427	2,227	.....	65,100	60,690	5,016	5,016	16	5,568	3,977	2,174	923	951	368	
Furzedpore	5,839	5,235	604	53,254	46,557	6,727	6,908	.....	6,908	930	4,990	8737	963	701	
Backersunge	3,305	3,756	230	1,49,457	1,31,027	18,430	19,123	.....	19,123	1,375	6,473	879	917	292	
Mymensingh	8,219	7,125	1,093	85,142	.....	.....	3,022	4	3,018	910	1,766	965	965	317	
Tipperah	1,406	1,396	7	88,157	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

III.—Statement of Demands, Collections, and Arrears of Road Cess on Lands and Mines for the cess year
1876-77—concluded.

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DISTRICT.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Arrears of 1875-76.	Arrears recovered during 1876-77.	Balance at the end of 1876-77.	Demand for 1876-77.	Coll. of 1876-77.	Arrears of 1876-77.	Total arrears, columns 4 and 7.	Remissions.	Net arrears.	Collections on account of next cess year.	Collections out of the arrears due at the end of 31st December 1877.	Percentage of current collections (column 12) on current demand (column 5).	Collections up to 30th September 1877, plus collections up to 31st December 1877, column 12 on column 5.	Collections for quarter ending 30th September 1877, column 12 on column 5.	Arrears at the end of 30th September 1877, column 12 on column 5.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Naakhelly ... ..	.....	.....	.....	83,248	62,091	20,557	20,557	.....	20,557	124	1,298	753	753	.....	63
Patna ... ..	.....	.....	.....	70,972	74,974	4,908	4,908	.....	4,908	1,287	1,140	687	687	.....	232
Gya ... ..	.....	.....	.....	98,868	93,541	13,827	13,827	.....	13,827	1,400	6,446	859	859	.....	468
Malahad ... ..	.....	.....	.....	1,48,115	1,50,578	17,557	17,557	.....	17,557	2,650	10,648	9815	9815	.....	458
Monticorye ... ..	.....	.....	.....	72,042	64,170	7,872	7,872	.....	7,872	2,611	3,841	8197	801	.....	454
Duridhanga ... ..	.....	.....	.....	75,970	71,130	4,730	4,730	.....	4,730	2,751	2,183	939	939	.....	462
Sarun ... ..	.....	.....	.....	77,465	43,667	33,578	33,578	.....	33,578	801	13,842	5580	736	.....	265
Chumpan	3,561	3,512	49	75,505	72,435	3,068	3,068	.....	3,068	235	2,191	9594	289	.....	337
Monchey	4,958	9,360	68	1,05,587	95,207	14,180	14,180	.....	14,180	2,804	5,012	8700	917	.....	2909
Bhagbhore	6,770	6,271	68	1,12,883	1,08,112	4,740	4,740	.....	4,740	3,330	3,323	978	987	.....	147
Purneah	2,155	1,231	534	76,776	69,566	1,210	1,210	.....	1,210	2,004	3,004	9823	975	.....	765
Malda	1,777	1,710	58	57,583	21,841	3,360	3,360	.....	3,360	135	3,067	477	966	.....	100
Onack	5,508	3,708	.....	47,529	36,161	1,268	1,268	.....	1,268	1,162	1,268	968	100	.....	100
Pooce	115	115	.....	15,671	1,571	.....	.....	.....	.....	1,106	.....	100	100	.....	917
Bahad	3,272	3,165	114	19,319	15,162	4,447	4,447	.....	4,447	4,361	4,383	7725	983	.....	317
Hazratpur	23	23	.....	21,841	21,841	600	600	.....	600	187	210	377	285	.....	317
Manbhum	4,514	4,111	.....	25,528	23,216	6,272	6,272	.....	6,272	.....	5,894	788	988	.....	334
Total	1,22,233	1,25,332	10,311	29,65,506	25,04,911	3,69,265	3,69,265	2,301	3,68,215	42,659	1,38,671	874	927	414	.....

It is satisfactory to note that out of the total arrears, amounting to Rs. 1,36,623, at the beginning of the year, Rs. 1,26,312, or 92·4 per cent., were collected. The demand for the year was Rs. 28,65,506, but the collections only amounted to Rs. 25,04,911. The percentage of collections on demands was therefore 87·4, against 91·6 of the previous year and 90·8 of the year 1874-75. A number of districts were, however, brought under the operation of the Act for the first time during the year.

The arrears of the current year were Rs. 3,60,595, of which 41·4 per cent., amounting to Rs. 1,53,471, was collected during the quarter ending 31st December 1877.

In the following eleven districts the collections attained the standard of 95 per cent. laid down by the Government of India, viz.—

	Per cent.		Per cent.
Pooree	100	Cuttack ..	96·8
Julpigoree	99·0	Tipperah ..	96·5
Purneah	98·2	Chunarun ..	95·9
Hazareebagh	97·7	Bhagulpore ..	95·8
Beerbhoom	97·5	24-Pergunnahs	95·4
Nuldea	97·3		

In nine districts the realizations were above 90 and below 95 per cent., viz.—

	Per cent.		Per cent.
Burdwan ..	94·8	Patna ..	93·7
Hooghly ..	94·5	Dacca ..	92·3
Moorshedabad ..	94·0	Jessore ..	90·4
Durblunga ..	93·9	Bankoora ..	90·0
Rajshahye ..	93·8		

Of the remaining seventeen districts, the worst collections were in—

	Per cent.		Per cent.
Sarun, which collected	55·8	Dinapore ..	76·7
Backergunge ...	63·8	Balasore ..	77·2
Noakholly ...	75·3	Manbhoom ..	78·8

The unfavourable result in Sarun was, it is said, due to the collections not having commenced till May 1877, this being the first year of the cess in the district, and to the failure of the *ajuni* crops.

The case of Backergunge is peculiar. Owing to the cyclone and storm-wave of 31st October 1876 the collection of the cess was postponed in some parts of the district. Besides, the demand in Backergunge was the largest in all Bengal.

In Noakholly also the short collections were due to the cyclone and storm-wave of 31st October 1876. In the case of the other districts, where the results were unfavourable, it is explained that the coercive measures provided by law were not sufficiently stringent, and are tedious in their operation. It may hereafter be expedient to take steps to remedy this defect in the law when the Act comes under revision; but in the meantime the Board should impress on the Collectors the necessity of measures being adopted for the speedy realization of arrears. It is also hoped that the tax-payers will soon learn by experience the great convenience of paying the cess simultaneously with the land revenue.

The collections of the cess on houses show an improvement over the previous year, but are still far from satisfactory. The total demand for the year amounted to Rs. 1,94,104, and the collections to Rs. 1,40,677, giving a percentage of 72·4, against 60·7 of the previous year.

The collections in seven districts were over 95 per cent., and in seven other districts between 90 and 95 per cent., as shown below :—

Per cent.			Per cent.		
Pooree	...	100	Bhagulpore	...	94·1
Nuddea	...	98·8	Dacca	...	93·6
Maldah	...	98·3	Furreedpore	...	93·3
Tipperah	...	97·6	Hooghly	...	92·7
Hazareebagh	...	97·1	Balasore	...	91·8
Beerbhoom	...	95·7	Patna	...	90·5
Chumparun	...	95·1	Bogra	...	90·1

The most unfavourable results were in —

Per cent.			Per cent.		
Sarun, which collected	...	2·3	Shahabad	...	26·1
Noakholly	...	18·3	Rajshahye	...	30·9
Rungpore	...	18·6	Manbhoom	...	40·0

The levy of the cess in Backergunge having been suspended, owing to the cyclone, no figures from that district are given in this statement.

It seems from the statement that the house cess was very differently assessed in different districts, and there is abundant evidence to show that this tax is not at all suited to the country. The house cess is in fact looked on as a great grievance, and has been a fruitful source of discontent out of all proportion to the income which it yields. For these reasons, and as the Bengal License Tax Act exempts persons who pay fees under that Act from the liability to pay the road and the public works cesses on houses, the suspension of the levy of house cess until further orders has been sanctioned.

With a view to bring the figures up to the end of the financial year 1877-78 as far as possible, the following statement has been prepared from the returns that were available.

V.—Statement of Demands, Collections, and Arrears of Road Cess on
Lands and Mines for the period ending 31st March 1878.

1	2	3	4	5	6	7	8	9	10	11
DISTRICTS.	Demand for the year 1877-78.	Arrears remaining unrecovered at the end of the year 1876-77.	Total demand (current and arrears).	Total collections (current and arrears).	Remissions.	Arrears unrecovered.	COLLECTIONS IN ANTICIPATION OF DEMAND ON ACCOUNT OF FUTURE YEARS.			
							Fourth quarter of this cess year.	On account of next cess year.	Total of columns 8 and 9.	Percentage of collections (column 8) on demand (column 4).
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Burdwan ...	1,48,046	6,510	82,811	72,184	11	10,616	121	306	430	87.1
Bankoorah ...	17,642	1,290	10,821	8,616	...	2,205	.....	14	14	79.6
Beerbhoom ...	37,735	957	20,138	19,690	...	448	6	4	10	97.7
Midnapore ...	1,44,332	29,410	1,02,449	65,519	...	36,930	67	313	380	63.9
Hoochly ...	75,052	5,728	43,526	35,510	...	8,016	334	729	1,063	81.3
24-Pergunnahs	1,08,345	5,753	60,904	53,657	...	7,247	440	681	1,121	88.1
Nudda ...	70,596	1,950	38,403	34,375	...	4,028	90	320	410	89.5
Jessor ...	1,01,950	9,754	61,776	45,822	...	15,954	244	497	741	74.1
Moorsshedabad	60,869	6,708	38,227	34,111	158	3,958	55	267	322	80.2
Dinajepore ...	75,388	19,607	57,590	30,262	...	18,298	.....	.....	.....	68.3
Rajshahye ...	62,512	3,645	35,093	31,605	...	4,088	97	116	213	85.5
Itanepore ...	1,25,152	17,060	80,144	57,498	...	22,646	.....	.....	.....	71.7
Bogra ...	33,695	4,071	21,359	16,543	...	4,816	.....	10	10	77.4
Patna ...	43,371	6,776	30,851	20,313	...	10,538	88	593	681	65.8
Darjeeling ...	17,782	.....	2,666	603	...	2,063	104	247	411	22.6
Darjilingoree	33,691	259	17,213	16,756	...	457	5	9	9	97.3
Dacca ...	60,158	5,416	40,912	30,426	...	10,486	130	2,207	2,337	74.3
Farreedpore ...	49,718	6,120	34,045	22,156	...	11,889	.....	.....	.....	65.07
Backergunge ...	93,610	70,452	1,21,706	60,385	...	61,411	40	225	265	49.5
Mymensingh ...	1,41,177	19,276	97,257	60,895	9	36,333	64	386	450	62.6
Tippurah ...	93,674	1,843	49,692	47,169	...	2,523	67	177	244	95.04
Chittagong ...	89,797	.....	47,382	7,652	...	39,730	12	1	13	16.1
Noukhilly ...	77,336	21,523	61,802	34,356	...	27,376	38	88	126	55.6
Patna ...	79,889	4,908	49,200	38,174	...	11,026	686	1,173	1,859	77.5
Gya ...	99,559	13,827	67,256	54,618	...	12,638	521	1,071	1,592	81.2
Shahabad ...	1,48,693	17,515	96,567	78,165	616	17,156	274	771	1,045	81.2
Mozufferpore ...	1,38,873	7,784	89,155	60,171	12	28,972	1,040	1,276	2,316	67.5
Durbihunga ...	98,189	4,859	54,196	44,481	...	10,015	1,587	2,113	3,700	81.6
Saran ...	1,53,486	33,941	1,17,327	56,648	...	60,679	241	254	495	48.2
Chumparan ...	75,626	3,117	44,951	38,818	...	3,133	21	126	149	92.5
Mouhlyr ...	96,175	11,878	67,277	56,521	...	10,753	1,371	1,378	2,749	83.7
Bhagulpore ...	1,22,479	4,797	72,578	64,895	...	7,683	3,732	2,698	6,430	89.5
Purneah ...	71,035	2,066	39,072	31,321	...	4,751	38	259	297	87.4
Malbh ...	21,738	3,751	16,283	12,265	...	4,018	18	38	56	75.3
Cuttack ...	54,452	1,268	28,494	23,616	...	4,878	.....	.....	.....	82.8
Pooree ...	19,124	.....	6,119	.....	.....	.....	.....	2	2	100
Balasore ...	26,120	4,563	17,623	11,603	...	6,020	.....	8	8	65.8
Hazarcebagh ...	30,912	660	16,116	14,461	...	1,155	29	34	63	92.9
Lohardugga ...	34,367	.....	16,066	13,690	...	2,376	161	.....	161	85.2
Manbhoom ...	34,090	7,383	24,427	16,998	...	7,129	.....	.....	.....	69.9
Total ...	30,63,845	3,69,617	19,77,664	14,41,830	836	5,34,098	11,785	18,396	30,181	72.8

It will be seen that besides the 37 districts in which the cess was levied during the cess year 1876-77 collections commenced from 1st October 1877 in the three remaining districts of Chittagong, Darjeeling, and Lohardugga.

The following statement shows the demands, collections, and arrears of cess on houses for the first half-year ending 30th April 1878. No figures are given for the districts of Chittagong and Patna; the return of the former district has been returned for correction, and none for the latter district has yet been received.

VI.—Statement of Demands, Collections, and Arrears of Road Cess on Houses for the (first) half-year ending 30th April 1878.

1	2	3	4	5	6	7	8	9	10	11	12
DISTRICTS.	Circles.	Demand for the cess year 1877-78.	Arrear remaining unrecovered at the end of the year 1876-77.	Total demand (current and arrear).	Total collections (current and arrear).	Total arrears.	Remissions.	Net arrears.	Collections on account of second-half of this cess year.	Collections on account of next cess year.	Percentage of collections (column 6) on demand (column 5).
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Burdwan ...	0	5,932	1,081	4,047	1,323	2,719	335	2,384	190	.....	32.8
Bankoora ...	2	2,169	500	1,669	505	1,080	.....	1,080	394	.....	31.8
Beerbhoom ...	3	2,100	85	1,135	984	151	.....	151	183	.....	86.6
Midnapore ...	2	16,165	2,030	10,112	6,378	3,734	31	3,703	1,703	.....	63.07
Hooghly ...	4	17,552	1,890	10,666	1,959	8,707	.....	8,707	.....	.....	18.3
24-Porkunnahs	6	9,508	1,301	6,055	4,812	1,243	51	1,192	201	.....	79.4
Nuddea ...	6	10,731	5	5,370	4,710	660	.....	660	81	.....	87.7
Jessore ...	6	5,594	581	3,378	1,936	1,442	68	1,374	.....	.....	57.3
Moorsheadabad	3	4,165	884	2,907	1,618	1,349	.....	1,349	1,202	.....	54.6
Dinapore ...	9	9,197	4,802	9,404	5,885	3,519	.....	3,519	2,657	.....	62.5
Rajshahye ...	3	2,223	2,272	3,384	2,032	1,352	31	1,321	121	2	60.04
Rangpore ...	4	12,801	10,120	16,820	5,559	11,261	.....	11,261	.....	.....	33.05
Bogra ...	2	4,906	519	3,062	864	2,138	.....	2,138	70	.....	28.7
Pubna ...	2	7,176	3,221	6,809	1,860	4,949	.....	4,949	.....	.....	27.3
Darjeeling ...	4	900	.....	495	2	493	.....	493	2	.....	4
Julpigoree ...	2	1,082	210	1,201	472	729	52	677	11	11	39.3
Dacca ...	4	6,028	372	3,385	850	2,535	.....	2,535	.....	.....	22.1
Furcedpore ...	11	2,124	145	1,207	872	335	3	332	57	.....	72.2
Backergunge	*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mymensingh ...	4	8,062	1,400	5,850	3,401	2,479	.....	2,479	.....	.....	57.8
Tippurah ...	2	3,071	.....	1,536	841	695	.....	695	.....	.....	54.7
Chittagong ...	†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Noakholly ...	3	1,639	1,812	2,162	1,112	1,050	.....	1,050	.....	.....	51.4
Patna ...	†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gya ...	2	8,916	3,158	7,016	2,075	5,541	.....	5,541	295	.....	27.2
Shahabad ...	1	5,251	3,879	6,505	2,212	4,293	.....	4,293	.....	.....	34.04
Mozufferpore	3	5,269	666	3,301	2,819	482	.....	482	411	28	85.3
Durbhanga ...	3	1,761	637	1,517	934	583	18	565	159	.....	61.5
Sriram ...	4	14,598	7,108	14,407	2,713	11,694	.....	11,694	8	.....	18.8
Chumparun ...	2	998	78	577	489	88	.....	88	258	8	84.7
Monghyr ...	3	4,607	716	3,050	1,283	1,767	.....	1,767	470	.....	42.06
Rhagulpore ...	6	2,184	139	1,731	804	427	111	316	12	.....	65.3
Purneah ...	6	2,752	622	1,998	1,030	968	.....	968	.....	.....	51.5
Maldah ...	2	2,463	31	1,263	600	663	4	659	.....	.....	47.5
Cuttack ...	1	1,806	388	1,391	560	731	63	668	30	.....	43.3
Pooree ...	3	66	.....	33	33	.....	.....	.....	.....	.....	100
Balasore ...	4	621	41	351	271	80	33	42	29	.....	77.2
Hazareebagh	4	2,146	63	1,137	724	413	23	390	256	1	61.5
Lohardugga ...	2	1,643	.....	822	478	344	.....	344	109	.....	58.1
Manbhoom...	2	6,208	3,475	6,579	2,965	3,613	6	3,607	131	.....	45.08
Total ...	136	5,84,304	54,121	1,52,278	67,971	84,307	834	83,473	9,004	50	44.6

* This is left blank, as the collection of house cess has been suspended in this district.

† Return sent back for revision.

‡ Return not yet received.

Land Revenue.

THE chief features in the land revenue administration of the year were the operations under the Land Registration Act VII (B.C.) of 1876 and the introduction of the Public Works Cess Act II (B.C.) of 1877. It was only in April 1877, towards the close of the six months' term of grace allowed by the notifications under the first of these Acts, that proprietors of estates came forward generally to comply with its provisions. The work thrown thereby upon the Collectors and their establishments was extremely heavy, and will be noticed in detail below.

The total number of estates on the revenue roll in 1877-78, as compared with 1876-77, is shown in the following table:—

Class of estates.		1877-78.	1876-77.
I.—	Permanently-settled estates	... 136,228	132,571
II.—	Temporarily-settled ditto	... 7,560	7,498
III.—	Government estates	... 2,569	2,432
IV.—	Ryotwari tracts	... 23	27
		<u>146,380</u>	<u>142,528</u>

The increase in class I was said to be mainly due to partitions of estates in the Behar Division. Of the total increase of 3,657 estates, 3,284 were accounted for in this way. Of the remainder, 332 are explained by the separate enrolment in Dacca and Backergunge of blocks hitherto lumped up with other estates, while 41 estates were added in Mymensingh, which had been omitted by mistake.

The increasing number of estates, and the increasing number of shareholders who make separate payments, caused serious embarrassment in the treasury and account departments of many districts. A committee has been appointed to consider whether it may not be possible to simplify the system of land revenue accounts and strengthen at the same time the treasury establishments. Measures were also taken to prevent further increase of work by amalgamating the accounts of the road cess and public works cess to a certain extent.

The current land revenue demand for the year, including malikana, revenue of police lands, and quit-rents of tributary mehals, stood thus, as compared with 1876-77, for each class of estates:—

		1877-78.	1876-77.
		Rs.	Rs.
Class	I ...	3,23,37,283	3,24,05,915
"	II ...	24,01,457	23,00,897
"	III ...	16,38,545	15,39,444
"	IV ...	5,18,682	4,81,085
Total		<u>3,68,95,967</u>	<u>3,67,27,341</u>

The demand shows fluctuations in nearly every district, but these were for the most part nominal, caused by transfers and adjustments of account. The amount of the actual increase is mainly made up by Rs. 60,000, derived from the settlements in Midnapore, and by further unspecified sums from the settlement of Tooshkhally and other estates.

		Rs.	
* Class I	...	9,18,106	against Rs. 17,87,823 of the year preceding.
" II	...	3,92,458	The total demand of the year was thus
" III	...	6,48,654	Rs. 3,89,69,158.
" IV	...	1,13,473	
Total	...	<u>20,73,191</u>	

The current collections in each class of estate compare thus:—

		1877-78.	1876-77.
		Rs.	Rs.
Class I	...	3,16,24,007	3,15,40,506
" II	...	21,63,506	21,06,082
" III	...	10,63,036	10,80,301
" IV	...	4,20,244	3,94,153
Total	...	<u>3,52,70,793</u>	<u>3,51,21,042</u>

The percentage on current demand was 95.59, against 95.35, or slightly in favour of 1877-78. The arrear collections were in—

		Rs.
Class I	...	8,16,078
" II	...	2,20,909
" III	...	3,66,225
" IV	...	91,661
Total	...	<u>14,94,873</u>

or 72.10 per cent., against 78.23 in 1876-77. Current and arrear collections together were Rs. 3,67,65,666, or 94.34 per cent. of the total demand, against 94.81 in 1876-77. The general result was slightly less favourable than in 1876-77.

The remissions granted during the year aggregated Rs. 84,055: thus—

		Rs.
In class I	...	8,598
" II	...	3,888
" III	...	58,363
" IV	...	13,206

Dividing according to the character of the remission, the tables show—

	Rs.	Rs.
Nominal remissions	17,888	against 48,818 in 1876-77.
Remissions of right	44,306	18,236
Ditto of grace	21,862	9,063
Total	<u>84,056</u>	<u>76,117</u>

Remissions of right and of grace show a large increase. They were due to diluvion, sale of B class railway lands revenue-free, taking up of lands for public purposes, redemptions, unoccupied holdings, and the like. They were heaviest in the 24-Pergunnahs, where they amounted to Rs. 15,507, and were swelled by the transfer of an estate to the

Suburban Municipality. Remissions of grace were largest in Pooree, Rs. 15,067, where lands lay waste owing to the temporary falling off in the salt manufactures.

Unrealized balances. The unrealized balances at the close of the year were as follow :—

		Rs.	
In class	I ...	8,07,207, or 2.42	per cent. of the gross demand,
"	II ...	4,05,612, or 14.51	" "
"	III ...	7,99,575, or 34.95	" "
"	IV ...	1,07,043, or 16.93	" "
		<hr/>	
		21,19,427, or 5.43	

against Rs. 19,19,294 at the close of 1876-77.

Of the total balance, Rs. 20,26,039 were in course of realization, and much has been collected since the year closed. About Rs. 93,397 will ultimately have to be remitted.

Under the heading of *permanently-settled estates*, class I, the heaviest balances were due in the following districts :—

	Rs.
Moorshedabad	1,92,644
Chittagong	1,59,177
Noakholly	94,731
Backergunge	40,632

The first three districts were the only ones in which the percentage of collection to total demand fell short of 95 per cent. Of the gross arrears, Rs. 1,00,433 represent revenue the payment of which was suspended in Chittagong in consideration of damages done by the cyclone of 31st October 1876. Rs. 1,44,428 were being realized under the sale laws, Rs. 18,640 of this being in Backergunge, which also suffered from the cyclone. Of the remaining balance (Rs. 5,62,345), Rs. 2,49,290 have been realized since the year closed, and Rs. 3,12,929 represent sums due from Wards' estates.

Of the very heavy arrears due from Wards' estates, Rs. 1,83,695 were due in the district of Moorshedabad alone. Under the law the Government revenue is the first charge on each estate after the necessary maintenance allowances and charges for management. It would seem, however, that Collectors have been in the habit of postponing the payment of Government revenue to the claims of private creditors, acting under a desire to save if possible the estates in their hands from ruin and sale. The illegality and impropriety of such a procedure has been pointed out. It is not the business of Government ordinarily to save the families of improvident landlords from the natural consequences of their own extravagance. In some few backward districts political considerations may point to the necessity of preserving old families and tribal leaders even in their own despite; but in the greater part of Bengal the Court of Wards exists mainly for the protection of the Government revenue.

Of the balance of Rs. 4,05,612 due from *temporarily-settled estates*, Rs. 21,170 were realized and Rs. 44,104 are said to be irrecoverable. The remainder was under recovery by various processes, Rs. 1,60,692 under Act VII (B.C.) of 1868. In Midnapore Rs. 89,912 were due

from Majnamutha, a temporarily-settled estate, but at present under direct Government management. The bulk of the arrears in other districts appeared also to be due from estates either farmed or under the management of Government officers. The balances on Government estates and ryotwari tracts are discussed in the chapter on Government estates.

The *miscellaneous revenue* of the year amounted to Rs. 2,13,277, against Rs. 1,38,551 in 1876-77. The outstanding balance at the close was Rs. 23,768, but of this the greater part was nominal, and will be written off.

The Subordinate Executive establishments of Sub-Deputy Collectors and canoongoes have continued to render excellent service. There is some difference of opinion as to whether they are most usefully employed in out-door work or in assisting the regular staff, sub-divisional officers and others, with their office work, so as to enable these last to go more frequently into the interior.

It is clear that the primary duties of Sub-Deputy Collectors and canoongoes should be in the interior amongst the people, and they should be made to supply a link in the communication between the sub-divisional officers and the villagers, which is very much required, though of course it is open to a sub-divisional officer to place them temporarily in charge of office duties when he is himself in the interior of his district. They must not be allowed to become mere office assistants, but should be two-thirds of the year at least travelling about their circles.

The following table shows the statistics of land registration work for each division:-

DIVISION.	Applications received to 31st March 1878.	Disposed of up to 31st March 1877.	Disposed of in 1877-78.	Pending on 1st April 1878.	Expenditure during 1877-78.
					Rs.
Burdwan	69,885	825	30,991	38,069	10,729
Presidency	53,761	184	18,116	35,461	7,229
Rajshahye and Cooch Behar...	28,102	88	10,825	17,189	4,547
Dacca	76,619	214	20,102	50,303	15,441
Chittagong	56,687	297	9,188	46,202	12,286
Patna	234,994	2,917	97,313	134,764	28,159
Bhugulpore	52,563	2,263	16,852	33,448	5,833
Orissa	136,364	945	12,245	123,174	16,392
Chota Nagpore	3,952	9	3,381	562	756
Total ...	711,927	7,742	228,013	479,172	10,172

Both in Dacca and Chittagong the work to be done is much greater than appears in the table, owing to the numerous cases in which applications regarding different shares, and even different properties, have been filed in one and the same petition. Notwithstanding the minute sub-division of properties in Behar, as clearly marked in the figures of the table, the work has made better progress in that division than in any other, there being less doubt as to the actual shares, owing probably to their having generally been split off by

formal partition. In Orissa the number of rent-free tenures is very large; and as these were treated by the settlement officers as revenue-free properties, the work of registration will be very heavy, unless it is decided to exempt petty estates of this class. The matter is under consideration. On the whole, in most districts satisfactory progress has been made in disposing of applications under the Act; and to ensure the completion of the work as soon as possible, the necessity of employing extra agency wherever really required has been admitted.

The operations under the sale laws show a very large increase both in the number of estates and shares liable to sale (8,077, against 4,825 in 1876-77) and the number actually sold (907 as against 496). The following table shows where the pressure of the law upon the petty landlord class was most felt during the past year:—

DISTRICT.	NUMBER OF ESTATES DEFAULTING IN		NUMBER OF ESTATES SOLD IN	
	1876-77.	1877-78.	1876-77.	1877-78.
Burdwan	121	242	12	80
24-Pergunnahs	42	128	5	20
Jessore	79	151	3	9
Moorsheadabad	48	240	15	46
Dacca	11	71	9	28
Furzedpore	50	116	6	12
Chittagong	1,225	4,032	286	373
Noakhally	67	213	4	15
Durbbhanga	175	305	15	8
Bhagulpore	50	121	5	11
Purneah	118	211	6	12
Hookhly ... ..	.....	.....	5	24
Nuldea ... ..	.....	.....	10	24
Shahabad ... ..	.....	.....	8	48
Total	1,986	5,830	388	710

Looking to the great number of defaults, in most districts the sales actually made were comparatively speaking few. Of the total number of sales (907), 851 consisted of whole estates, 50 of shares, and 6 of rights and interests. The revenue demand on them was Rs. 1,57,188, and their average revenue Rs. 173. The amount due was Rs. 37,807, and the purchase money realized was Rs. 13,30,826, or a little less than nine times the Government revenue,—a result slightly less favourable than last year. Government had to buy in 84 estates with a demand of Rs. 16,416, as against 59 estates with a demand of Rs. 1,348 last year. Appeals against sales were preferred in 42 cases, and in 19 cases the sales were annulled; in 10 other cases the sales were set aside on the ground of hardship. The number of sales in Shahabad was swelled by the disposal in this way of the Solano estates, 30 in number, of which 10 were bought by the ryots for Rs. 2,19,320. It appears that the number of sales in the Patna Division has been increased, and is likely to be still further affected by a ruling of the Privy Council which is calculated to disturb the rights of purchasers under civil court decrees in cases where the judgment

debtor was under Mitakshara law. To avoid this estates are, it is said, allowed to default.

On the whole the sale laws have worked well; and if under-tenure-holders occasionally suffer, it is through their own laches in not registering and protecting themselves. It is suggested that it would prevent many temporary defaults from carelessness or intention if the Collector were required to impose a small penalty before exempting from sale. It may be possible to meet this by imposing a higher stamp on such applications under the stamp law, and the Board have been asked to submit definite proposals without delay, as that law is now under amendment. There is no trace of any serious decline in the value of property on account of the Road Cess and Public Works Cess Acts, and the results of sales under the cognizance of the Board go to show that land is still the most coveted investment in the country, and that capitalists are willing to take less than half the interest they would demand for loans on good security as an adequate return for an investment in land.

The total number of partition cases disposed of was 584, against 638 in 1876-77. In the Patna Division, where most of these cases arise, the number of institutions was only 89, against 331 in the preceding year, and the number pending on 1st April 1878 was only 688, against 1,056. A check would seem to have been imposed on institutions for the present chiefly by the new law, VIII (B.C.) of 1876, which forbids applications from those who are not recorded proprietors, while making the preliminary proceedings in partition cases more strict and formal. Proprietors have therefore in many cases to await the result of the land registration operations before they can proceed with the partition of their estates.

There were only 40 cases of redemption of land revenue, all in petty holdings in Calcutta and the Suburbs. The total amount of revenue redeemed was Rs. 113, and the price paid Rs. 2,816. The total number of petty estates on which the revenue has been redeemed, with their revenue, the price realized up to the end of 1877-78, and the number remaining to be redeemed, stand thus:—

No.	Number of estates.	Revenue redeemed.	Price realized.	Estates remaining to be redeemed.	Revenue to be redeemed.	Price expected.
		Rs.	Rs.		Rs.	Rs.
Calcutta	803	2,014	32,533	10,697	20,216	5,05,400
Punchanogram	439	2,030	40,001	16,067	50,702	12,67,559
Chittagong	14,227	5,583	65,949	13,539	5,340	1,33,494
Chinsurah	21	67	1,300	2,050	4,061	1,01,525
Other districts	774	495	4,359	.....	.....	.....
	16,263	10,130	1,34,253	42,343	80,319	20,07,978

The total area of the lands acquired for public purposes during the year was 3,636 acres, at a total cost of Rs. 8,43,794, plus abatements of Government revenue, which amounted to Rs. 240. The total area acquired under the

old law (VI of 1857) up to the close of 1877-78 was 32,447 acres, at a cost of Rs. 57,06,624; while 38,117 acres were acquired under Act X of 1870, at a cost of Rs. 59,30,451. The average cost of all the land taken was Rs. 167 an acre; but this includes all the lands taken up in and about Calcutta for the Port Commissioners and Municipality, as well as for Government, lands which sometimes averaged over Rs. 70,000 an acre. The Board report that the Act of 1870 works fairly and well in most respects, and that the chief drawback is the necessity which exists under it for referring even the most petty cases to the civil courts when any single person interested fails to appear before the Collector. The rules under the Act have recently been revised and improved.

There were no sales of waste lands during the year, but in Julpigoree 118 leases, covering 6,744 acres, were given. Revised tea lease rules for Julpigoree and Darjeeling have just been published, and rules for the Sunderbuns, Chittagong, and other parts of the Lower Provinces are under consideration.

Leaving out of account the increase of more than eight lakhs in the revenue derived from salt, there remains an increase of fifteen lakhs in the duty levied upon other imports. By far the larger proportion of this was due to larger imports of cotton yarn and piece-goods, although the imports of liquors and metals also contributed materially to the rise of duty. Under the head of exports the increase of revenue was less marked, amounting to Rs. 42,617 only. The effect of a rise in the amount of duty collected on rice was counterbalanced by the increased refunds of duty necessitated by a change in the procedure followed by the Customs Office in respect of shipping passes. There was a considerable rise in the amount of revenue derived from the duty on indigo, and an equivalent fall in that levied on shell-lac.

Details of the trade of Bengal, both foreign and interportal, will be found in another section of the present report.

OPIUM.

The report for 1877-78 not being due till the 1st February 1878, the following paragraphs relate principally to the season 1876-77, regarding which detailed information has been received by Government since the publication of the last year's report.

The total area under poppy cultivation in the Behar and Benares Agencies together was 889,622 begghas, which yielded 1,25,255 maunds of opium (reducing the various qualities received to a uniform standard of 70° consistence). This outturn, though less than the exceptionally large yield of 1875-76, was considerably above the average.

In both Agencies fears were entertained in the middle of the season that the crop would be seriously injured by continuous wet weather and high winds; but, contrary to all expectations, the outturn was remarkably large in quantity, though of a singularly low consistence. This feature of low consistence was common to all parts of the producing area. In Behar it so affected the operations of the year that the whole of the provision opium had to be caked at a consistence of 73° instead of 75°, the usual standard; and in Benares, where the standard is 70°, it was only found possible to maintain this by working in 2,143 maunds of opium which could not be used in the previous year on account of its abnormally high consistence. No loss was allowed to fall upon the purchasers of the Behar drug on account of the low consistence, as extra weight was given under the Board's orders in each cake manufactured.

In the following table the principal statistics of general interest in connection with the opium cultivation and manufacture during the past five years have been brought together for the sake of comparison :—

General statistics.

Behar Agency.

YEAR.	AREA CULTIVATED.		Total.	Advances for wells.		Gross weight of opium received, including commissions.	Produce at 70° consist- guc.	Average produce per hectha at 70° consist- guc.	Net expenditure of the season.	Sale proceeds at Cal- cutta.	EXCISE OPIUM.		Total number of chests manufactured on all accounts.	Average cost per chest on net expenditure.	Number of chests sent to Calcutta.	Average per chest on sale proceeds.	Rate paid to ryots per seer.
	Irrigated.	Non-irrigated.		Mds.	Rs.						Quantity sup- plied.	Value at Rs. 7-4 per seer.					
1872-73	Bgs. 345,439	Bgs. 126,341	471,780	Rs. 30,839	51,901	54,846	4 10 2	1,19,09,445	3,25,99,438	5,637	16,40,437	30,771	399	26,770	1,242	5	
1873-74	Bgs. 333,879	Bgs. 76,399	410,278	1,25,760	56,336	60,891	5 15 0	1,32,49,827	3,27,29,550	4,846	12,60,354	33,933	390	30,856	1,268	5	
1874-75	Bgs. 304,350	Bgs. 145,963	510,313	65,455	54,725	58,977	4 10 0	1,29,41,076	3,51,01,946	4,748	13,77,086	32,703	395	29,840	1,309	5	
1875-76	Bgs. 327,010	Bgs. 113,916	470,926	84,846	63,350	68,704	5 13 1	1,43,26,616	3,24,59,275	4,433	12,57,216	33,108	395	34,637	1,298	5	
1876-77	Bgs. 377,862	Bgs. 139,515	517,377	29,103	62,252	63,693	4 14 3	.....	.....	4,853	14,03,800	34,915	.....	32,163	.....	5

Benares Agency.

...	344,309	12,132	356,449	415 1,357	34,384	33,253	3 11 2	76,05,482	2,25,02,175	808	2,34,254	19,327	440	19,000	1,189	5
1872-73	...	319,056	9,697	328,654	43,113	43,000	5 3 3	96,25,656	2,32,57,400	1,811	5,25,349	25,248	463	23,860	1,212	5
1873-74	...	350,415	11,157	361,572	39,775	39,201	4 5 1	80,20,695	2,51,23,390	1,104	3,20,207	23,617	498	22,414	1,243	5
1874-75	...	370,955	13,689	384,644	60,457	60,113	6 4 0	*1,25,35,094	.....	1,620	4,40,892	35,296	4378	33,094	.....	5
1875-76	...	385,025	9,562	374,587	65,339	61,561	6 9 0	*1,32,18,146	.....	1,554	4,50,705	36,146	4377	35,001	.....	5
1876-77	...															

* Includes value of leaves in reserve, &c., excluded in previous years, which makes net cost per chest unduly high.

† Cost calculated on number of chests sent to Calcutta, not on total outturn of chests, as in Behar.

As regards cultivation, the chief difference between the two Agencies is the large extent of non-irrigated area in Behar. North of the Ganges, in Behar, the opium-

Cultivation. growing area is as a rule not irrigated, and a wet season is deemed more favourable than a dry one. In a dry season large advances have to be made in this tract on account of temporary wells. The effect of the wet weather of 1876-77 in reducing the advances on this account is manifest in the table. An examination of the columns showing the gross weight of opium delivered and its equivalent at 70° consistence brings out a further difference between the results of the two Agencies. Ordinarily the Behar opium is above 70°, and that of Benares slightly below 70° on the average. The effect of the wet season in reducing the consistence of the drug in both Agencies was very marked. In the Behar Agency there was, with an increased area under cultivation as compared with 1875-76, a decrease of about 5,011 maunds in outturn at 70°; while in Benares, with a reduction of area, there was an increase of outturn. This is accounted for by the column showing average produce per beegha, the Behar yield having fallen from 5 seers 13 chittacks 1 kutchas to 4 seers 14 chittacks 3 kutchas, while that in Benares rose from 6 seers 4 chittacks to 6 seers 9 chittacks, the highest figure ever known. It is not possible to compare the average cost per chest for the two Agencies, as the Benares figures are made up on a different principle from those for Behar.

In the *Behar Agency* the Chota Nagpore Sub-Agency and the Rohni Kotee in Monghyr have been closed since the end of the year under report. The results of their working in 1876-77 were as unsatisfactory as in preceding years, and considerable savings in establishment have been secured by their abandonment. The working of the department in this Agency seemed to have been on the whole satisfactory. The quantities of impure opium erroneously passed by Sub-Deputies and attempted to be passed by cultivators both showed a marked decrease. The outstanding balances of advances were trivial—Rs. 1,136 only. The disbursement of rewards for detection of illicit transactions had increased.

In the *Benares Agency* there appeared to be a tendency, not apparent in the Behar returns, for cultivators to sow in excess of their engagements. In accordance with the recent policy of Government of limiting the area under cultivation, the Board have ordered the excision of the clause in the cultivator's license which legalised excess sowings. This measure, and the reduction in the price of opium to Rs. 4-8 per seer, will, it is expected, keep down the area under poppy. In this Agency there was an increase both in the quantity of impure opium passed by the Sub-Deputy Agents and in the quantity attempted to be passed by the cultivators—exactly the converse of the results in the Behar Agency.

Experimental cultivation was carried on in both Agencies with the seed selected by Mr. Scott, but in Behar the experiments were not attended with any marked success. It has been decided by the Government of India that Mr. Scott's deputation shall continue to the end of the present season, so as to enable him to distribute selected seed among the Sub-Deputy Agents and to bring to a close the

experimental cultivation which is being conducted by hired labour under his personal supervision. "Reviewing the operations as a whole, it can hardly be said that they have produced any results commensurate with the expenditure involved. Mr. Scott has prepared a Manual of Opium Husbandry, which can hardly fail to be instructive to the officers of the Opium Department; but his experiments have not elucidated the problem of the origin of poppy blight, and have exercised no influence over the traditional methods of cultivation in vogue among the ryots.

The purchase of Nepal opium at a price uniform with that paid to cultivators in British territory was sanctioned during the year. There appeared to be some reason for thinking that poppy cultivation is on the increase in the Nepal Terai, for the quantity of the drug brought in for sale in the Behar Agency rose from 243 maunds in 1875-76 to 627 maunds during 1876-77, while the proportion of the amount which was found to be adulterated had considerably diminished. The question of the export of opium from Nepal through British territory under passes granted to traders by the Government of the Punjab was subsequently taken into consideration.

The saw-mill at Patna worked successfully on the whole. The outturn of chests was larger than in 1875-76, and the slight increase in cost was apparently due to a rise in the price of coal. In the important matter of the supply of timber for manufacture into chests, it was doubtful whether full reliance could be placed upon the produce of the forests of the North-Western Provinces and Oudh, and considerable difficulty was experienced in floating logs down the rivers to Patna. The Board were asked to give special attention to this question of timber-supply, which, in the absence of a sufficient local supply, is one of considerable importance.

The system adopted in the Benares Agency of granting rewards to deserving cultivators, by allotting to them contracts for the supply of poppy trash to be used in packing, was approved by Government. A considerable saving was effected by abandoning the old practice of presenting shawls to cultivators who produced good opium; but it is hoped that the new system will offer even more substantial inducement to the ryots to cultivate carefully, as the trash contracts are represented to be lucrative.

The introduction into Ghazipore of the chalan system of weighing opium was deferred until further experience has been had of its working in Azimgurh.

The following statements show the receipts, charges, and net revenue of the Opium Department during the official year 1877-78 as compared with the results of the official years 1861-62, 1862-63, 1871-72, 1875-76, and 1876-77. Some of the figures for 1876-77 will be found to differ from those given in the last year's statement, owing to the accounts for that year not having been finally closed when the Accountant-General submitted the statement from which the figures were taken. For the same reason the figures for 1877-78 are open to correction.

It will be seen from the subjoined statement that the number of chests of provision opium of both Agencies sold during the year under review amounted to 49,500, being 2,260 chests in excess of the number sold during the preceding twelve months. The total receipts amounted to Rs. 6,42,60,285, and the charges to Rs. 2,64,73,997, leaving a net revenue of Rs. 3,77,86,288, being Rs. 44,46,296 more than that of the preceding year and Rs. 7,28,945 more than that of 1875-76. The average price realized per chest amounted to Rs. 1,266-8-4, against Rs. 1,270-1-10 $\frac{3}{4}$ in 1876-77, showing a difference in the price per chest of Rs. 3-9-6 $\frac{3}{4}$ as compared with the previous year:—

1	2	3	4	5	6	7	8	9	10
OFFICIAL YEAR.	NUMBER OF CHESTS SOLD.			AMOUNT REALIZED.		Abkarree and miscel- laneous receipts.	Total receipts.	Total charges.	Net revenue.
	Behar.	Benares.	Total.	Behar.	Benares.				
	No.	No.	No.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1861-62 ...	15,004	9,059	24,063	2,42,99,445	1,40,36,350	8,05,765	3,91,41,569	1,44,40,280	2,47,01,280
1862-63 ...	17,964	14,869	32,833	2,61,75,630	2,07,47,805	12,02,200	4,81,25,725	1,91,62,161	2,89,63,574
1871-72 ...	29,985	19,710	49,695	4,19,81,111	2,69,93,925	11,960	6,89,86,096	1,59,23,458	5,30,63,538
1875-76 ...	26,055	10,455	45,510	3,34,43,150	2,38,62,425	19,12,207	5,92,17,782	2,21,60,439	3,70,57,343
1876-77 ...	26,350	20,890	47,240	3,43,24,900	2,56,75,500	17,37,881	6,17,38,281	2,83,98,289	3,33,39,992
1877-78 ...	26,245	23,255	49,500	3,39,91,600	2,87,01,225	15,67,460	6,42,60,285	2,64,73,997	3,77,86,288

The statement given in the margin shows the quantity of land

AGENCY.	1876-77.	1877-78.	* Difference.
	Beeghas.	Beeghas.	Beeghas.
Behar ...	520,090	494,010	26,080
Benares ...	374,760	354,708	20,082
Total ...	894,850	848,718	46,162

engaged for cultivation during the past two years. In the year under report there was a decrease in both Agencies, as compared with the area engaged in the previous year, amounting in the aggregate to 46,162 beeghas.

The outturn of provision opium in the Behar Agency available for sale in 1879 is reported to be 18,140 chests, against 32,166 chests manufactured in 1876-77, being 14,026 chests less in the year under review as compared with the produce of the preceding year. The outturn in the Benares Agency is reported to be 25,000 chests, against 35,001 chests manufactured in 1876-77, or 10,001 chests less in the year under review.

It will thus be seen that the total quantity of opium manufactured during season 1877-78 was 43,140 chests. A total of 60,000 chests will be brought forward for sale in 1879, which will include the reserve (48,482 chests) of the manufacture of season 1876-77.

Statement showing the Receipts, Charges, and Net Revenue of the Opium Department for the following years.

ITEMS.	1861-62.	1862-63.	1871-72.	1875-76. *	1876-77.	1877-78.
<i>Receipts.</i>	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Proceeds of sale of opium by public auction at the Presidency	3,83,35,795	4,69,23,435	6,80,75,036	5,73,05,575	6,00,00,400	6,26,92,825
Value of opium supplied for abkaree and medical purposes	7,71,827	11,68,784	4,385	4,822	9,154	5,066
Cost price of opium sold in the Excise Department to Government of Bengal .. .. .	.....	.....	.....	5,17,811	5,03,711	5,13,287
Cost price of opium sold in the Excise Department to other Governments .. .. .	.....	.....	.....	12,15,718	11,29,457	9,84,913
Fines, savings, and miscellaneous receipts	32,262	33,506	7,555	1,73,866	95,551	64,197
Confiscations	1,076	.....	20	.....	8	7
Total Receipts	3,91,41,500	4,81,25,725	6,80,86,996	5,92,17,782	6,17,38,281	6,42,60,285
<i>Charges.</i>						
Cost and charges of Oudh opium .. .. .	.....	.....	.....	.....	.....	.....
Salaries and establishments	6,95,096	7,70,867	7,72,040	7,88,078	8,26,016	8,01,293
Manufacturing charges	6,56,612	7,91,300	10,48,581	13,21,203	14,91,110	15,02,130
Payments for cultivation	1,30,64,258	1,75,99,984	1,40,73,900	2,00,45,359	26,074,810	2,41,64,029
Confiscations	1,985	.....	.....	.....	.....	.....
Miscellaneous disbursements	22,329	.....	28,937	4,799	6,323	6,545
Total Charges	1,44,40,280	1,91,62,151	1,59,23,458	2,21,60,439	2,83,98,289	2,64,73,997
Net Revenue	2,47,01,220	2,89,63,574	5,30,63,538	3,70,57,343	3,33,39,992	3,77,86,288

Statement showing the Receipts, Charges, and Net Revenue on account of Abkaree Opium for the following years.

YEARS.	Sale proceeds of opium.	Cost of opium and contingencies.	Balance.	REMARKS.
	Rs.	Rs.	Rs.	
1861-62	The figures for 1861-62 cannot be given by the Accountant-General of Bengal owing to the statement for the period not being forth coming. * The practice of debiting to the Abkaree Department the cost of opium at Rs. 7-4 per seer was discontinued from 1871-72.
1862-63	16,56,905	20,347	16,36,558	
1871-72	37,09,870	* 6,965	31,02,911	
1875-76	11,77,763	* 5,725	11,72,038	
1876-77	11,75,537	* 6,023	11,69,512	
1877-78	12,48,606	* 5,633	12,42,972	

The new Opium Act XXIII of 1876 was not extended to Bengal until after the close of the year under report. A set of rules under the Act has been sanctioned. The working of the Act and rules will be more fully noticed in next year's report.

A set of rules for regulating the relative duties and responsibilities of Deputy and Sub-Deputy Opium Agents was brought into force during the year in concert with the Government of the North-Western Provinces.

EXCISE.

During the year under review the local Government was for the first time financially responsible for the excise revenue; and the result has been in every respect satisfactory. Provincial revenues were, under the contract entered into in respect to the establishment of provincial finance, bound to pay to the Government of India Rs. 64,00,000 on account of excise revenue, and the receipts have amounted to Rs. 68,66,130.

The following statement shows the total collections of the year 1877-78 under each head, as compared with those of 1876-77 and with the average collections of the five years from 1872-73 to 1876-77:—

REVENUE.	IN 1877-78 AS COM- PARED WITH 1876-77.				IN 1877-78 AS COM- PARED WITH THE AVERAGE OF 1872-77.	
	Average of 1872-73 to 1876-77.	In 1876-77.	In 1877-78.	Increase.	Decrease.	Increase.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Country spirits	23,84,409	26,25,399	28,90,460	2,65,061	5,06,051	.....
Rum ...	2,97,359	2,40,263	2,92,107	51,844	.....	5,252
Imported wines, &c.	89,582	94,244	1,04,501	10,257	15,919	.....
Tari ...	6,11,710	6,23,085	6,36,693	13,608	24,983	.....
Pachwai ...	1,18,613	1,23,572	1,33,529	9,957	14,916	.....
Churns ...	2,926	2,671	3,141	470	215	.....
Sidhhi, sabzi, or	.....	.....	.....	.....	.....	171
bhang ...	12,927	13,442	12,750	.....	.....	.....
Majum ...	2,322	2,557	2,818	267	496	.....
Madut ...	64,310	63,175	68,178	5,003	3,868	.....
Chuudu ...	16,550	17,347	19,154	1,807	2,604	.....
Spirits used in the	.....	.....	.....	.....	.....	2,614
arts ...	3,982	8,354	1,338	.....	.....	.....
Ganja ...	11,10,900	11,97,116	13,85,657	1,88,541	2,74,757	.....
Opium ...	11,83,278	12,35,385	13,15,292	79,707	1,32,014	.....
Miscellaneous ...	178	.....	506	251	328	.....
Total ...	58,98,046	62,47,059	68,66,130	6,28,773	7,792	9,76,151
						8,067

The increase shown under all the chief heads is gratifying, since it is due to higher rates of duty, to improvements in the system of excise, and to the increasing wealth of the people.

There is no more certain indication of the increasing wealth of the country than the steady progress of the excise revenue, and that progress in Bengal has been most marked since the famine year of 1874-75. In that year the excise revenue was in round numbers 56½ lakhs, in 1875-76 it was more than 60½ lakhs, in 1876-77 it was nearly 62½ lakhs, and in 1877-78 it was 68½ lakhs. No doubt much of the increase this year is due to greater attention to the administration of the department, for otherwise, in the face of the high prices of food which have ruled throughout the year, a falling off in the consumption of taxed spirits and drugs might have been expected.

Simultaneously with the increase of revenue there has been a decrease not merely in the ratio of cost of collection to receipts, but even in the actual cost of collection. In 1874-75 the cost of collection was Rs. 3,00,083, in 1875-76 Rs. 2,98,115, in 1876-77 Rs. 2,96,532, and in 1877-78 Rs. 2,91,249. During the same years the percentage ratios of cost of collection to receipts were 5·3, 4·8, 4·7, and 4·2.

An important feature of the excise administration of recent years has been the partial substitution, as regards country spirits, of the outstill for the central distillery system. The principle of the latter system is theoretically perfect, inasmuch as it imposes on each gallon of spirit that passes into consumption a rate of duty proportioned to the amount of alcohol it contains, but in practice it does not work well, except in the neighbourhood of large towns, and there is no doubt that the limitation of the stills to one or two centres in each district has led to much illicit distillation in places at a distance from these centres, and the outstill system has been found preferable in remote, backward, or sparsely populated tracts, as well as along the borders of foreign states.

The satisfactory nature of the change is shown by the fact that in 18 districts where the outstill system has been introduced with partial effect the average number of shops under the central distillery system from 1872-73 to 1876-77 was 1,419, and the average annual receipts were Rs. 5,00,317, while in 1877-78 the number of such shops was only 1,134, and the receipts were Rs. 5,08,200.

The average number of shops in the same districts under the outstill system was 871 in the five years 1872-77, and the average receipts Rs. 247,154, while in 1877-78 the number was only 782, while the receipts were Rs. 3,34,453.

It is gratifying to find that while the consumption of country spirits under the central distillery system in 1877-78 was less than the consumption in the previous year by 81,301 gallons (3·3 per cent.), the revenue should have increased by Rs. 2,10,248 (9 per cent.)

The average annual consumption of rum during the five years 1872-77 was 81,198 gallons. In 1876-77 the consumption was only 48,663 gallons. In 1877-78 it rose to 62,018 gallons. 3,031 gallons of this increase is due to the import of Madras rum into Orissa.

It is believed that the revenue from rum consumed in Bengal is being affected by the importation of rum which has already paid duty in the North-West Provinces, and a reference has been made to the Government of India on the subject.

The following statement shows the revenue in 1876-77 and 1877-78 from imported wines, spirits, and fermented liquors :—

	1876-77.	1877-78.
	Rs.	Rs.
Wines and liquors	3,19,070	2,29,687
Spirits	9,83,210	10,64,630
Beer and other fermented liquors	34,563	39,549

The duty on imported wines, spirits, and fermented liquors is treated as customs revenue, and is not credited to the provincial revenues.

The average annual revenue from tari in the five years 1872-77 was Rs. 6,11,710. In 1876-77 it was Rs. 6,23,083, and in the year under review Rs. 6,36,693. Nearly two-thirds of the whole tari revenue is obtained in the Patna Division. Considerable amounts are also collected in the Presidency and Bhagulpore Divisions.

There is some ground for believing that the revenue from tari might be considerably raised. The rate of license for each shop is separately settled every year, and as the number of shops in the chief producing districts is very large, it may be feared that sufficient attention to prevent collusion cannot be given to each case by a trustworthy and responsible officer, and consequently it was suggested to the Board of Revenue in December last that the tari revenue might be increased by letting to one person, not a single shop, but a circle of some extent, within which he would possess the monopoly of sale. If each circle contained only three shops, the number of separate cases to be dealt with yearly by the excise officers would be reduced to one-third of the present number. This practice has been followed with much success in Burmah. If in addition the right of sale was given for three years, the total number of cases would be reduced to one-ninth of what it now is, and as a matter of convenience it could be arranged that one-third of the licenses would fall in yearly. Under this system the revenue would benefit by the circle license-holder being in a better position to make terms with the owners of the trees from which the tari is extracted, and by the greater amount of time and attention which the superior officers of the department could give to each case. At present the letting of the tari shops is often left practically to a mohurir so poorly paid as not to be above temptation, while the sub-divisional or other excise officer is content if the revenue of the year shows a light increase, or, at any rate, is not less than that of the preceding year. The want of elasticity in the revenue from tari as compared with that from country spirits is clearly shown by the following figures:—

		Revenue from—	
		Tari.	Country spirits.
		Rs.	Rs.
1872-73	... ..	6,04,701	21,21,268
1873-74	... ..	6,20,841	23,35,380
1874-75	... ..	6,02,724	22,28,066
1875-76	... ..	6,07,172	25,10,064
1876-77	... ..	6,23,085	26,25,399
1877-78	... ..	6,36,693	28,90,460

The attention of the Board of Revenue has been drawn to this subject. It is to be hoped that improvements similar to those lately introduced in other branches of the department will be effected in the system of collecting the tari revenue.

Ganja is doubtless the most injurious of all the articles which contribute to the excise revenue; it is therefore a matter of some regret that the amount consumed should have risen from 7,458 maunds in 1876-77 to 8,196 maunds in 1877-78, or by nearly 10 per cent. Government has for years discouraged the consumption of ganja, and though the amount consumed increased by nearly 10 per cent. in 1877-78, the amount of revenue in the same year increased still more, viz. by 15.7 per cent. The amount of revenue in 1876-77 was Rs. 11,97,116, and in 1877-78 Rs. 13,85,657.

The rates of duty on ganja have been still further raised from 1st April 1878, and arrangements are in progress for checking the importation of Gurjat ganja into Orissa. So long as the consumption of ganja has a tendency to increase, the rates should be periodically raised.

The revenue from churus, siddhi or bhang, and majum, is not of importance; and though the changes of system now under consideration may lead to an increase, such increase cannot be expected to be of large amount.

The average annual income from opium consumed in the Lower Provinces during the five years 1872-77 was Rs. 11,83,278. In 1876-77 it was Rs. 12,35,585; during the year under review it was Rs. 13,15,292. There was an increase of consumption as compared with the previous year to the extent of 31 maunds, and of revenue to the extent of Rs. 79,707. The increase of consumption was only 1·7 per cent., while the increase of revenue was 6·4 per cent. This favourable result is due to the increase of the price of opium from December 1877, and a still further increase may be expected in the current year, arising both from the increased price and from the settlement of opium shops by means of the auction system.

The income from opium consumed in the districts in which the poppy is cultivated continues to be insignificant. The question of how to obtain a fair revenue from the opium consumed in those districts has long occupied the attention of many officers of ability and experience, but without receiving a satisfactory solution. It seems probable that a moderate increase of revenue would be obtained by the introduction of a modified system of farming.

License fees for the sale of madut and chundu increased from Rs. 80,52½ to Rs. 87,332, or by 8·4 per cent.

Although only Rs. 199 was written off as irrecoverable in 1877-78, the outstanding balance at the close of the year did not exceed Rs. 8,660, of which Rs. 5,001 has since been recovered.

The number of persons arrested in 1877-78 was 2,916, as against 2,426 in the previous year. 2,032 convictions were obtained in 1876-77, and 2,491 in 1877-78.

SALT.

The receipts of the year showed an increase of Rs. 7,64,417 over those of 1876-77, and that notwithstanding a falling off of Rs. 31,753 in receipts from golah rents. Under all the other headings, viz. duties on imported and excise salt, rowannah fees, and miscellaneous receipts, there was an improvement amounting in gross to Rs. 7,96,170. The receipts of the last five years stand thus:—

					Rs.
1873-74	...	...	...	...	2,59,92,661
1874-75	...	...	...	...	2,64,87,143
1875-76	...	...	...	...	2,53,41,925
1876-77	...	...	...	...	2,56,90,656
1877-78	...	...	...	...	2,64,55,073

The following table shows the stocks, imports, manufacture, and clearances for consumption of the last five years :—

	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.
	Mds.	Mds.	Mds.	Mds.	Mds.
Stocks at commencement of year ...	23,25,766	20,59,418	20,87,317	41,53,800	42,50,816
Imported and manufactured during the year ...	78,41,600	82,88,081	1,00,21,736	82,66,990	61,63,127
Cleared for consumption ...	79,44,247	81,99,389	79,14,513	81,07,022	81,82,302
Wastage, &c. ...	1,63,704	60,793	43,630	63,032	1,03,213
Balance at close of year ...	20,59,418	20,87,317	41,53,880	42,50,816	21,23,566

There was a further decrease in imports during the year, as the heavy stocks received in 1874-75 had still to be worked off. The imports by sea of 1877-78 were only 62,92,141 maunds, against 78,58,142 in 1876-77 and 97,00,310 in 1875-76. This decrease in imports occurred both at Calcutta and Chittagong, but was attributable in the case of the latter port to local stagnation of trade and distress arising from the cyclone of 31st October 1876. The importations into Calcutta fell off from every port except Bombay. The continued falling off in the imports from continental Europe, Egypt, and the Arabian and Persian Gulfs is an unsatisfactory feature in the returns of the last few years. Chittagong took the bulk of its supply as usual from Great Britain, but 23,698 maunds were also received by it from Madras. Balasore had an import of 5,992 maunds from Madras, the first time for many years that salt had been imported into that saliferous district.

The clearances of salt for consumption stood thus :—

	Quantity. Mds.	Duty. Rs.
Sales of imported salt from shipboard.	54,59,877	1,69,59,194
Ditto ditto from bond	26,51,799	82,78,811
Sales of excise salt ...	3,70,686	10,03,065
Total	84,82,362	2,62,41,070

The increased consumption indicated by increased clearances is very satisfactory. From the returns of internal trade compiled under the orders of Government it appeared that the most marked increase was in Behar, where the average consumption of the population rose to nearly the same standard as that of Bengal generally, being upwards of 10lb per head after making all allowances for export beyond the province. The general increase in consumption throughout Bengal in a year of very high prices is a certain sign of the prosperity of the agricultural classes, and a proof that the profits arising from the sale of their crops at abnormal rates have to some extent reached them and remained with them.

The manufacture of excise salt was very slack during the year, the total outturn being 1,70,986 maunds, against 4,07,975 maunds in 1876-77. The decreased outturn in Balasore was owing to failure of the manufacture, a fact which

also accounts for the import to that place of Madras salt. In Pooree the trade was a losing one, owing to the competition of Ganjam salt, and it was only kept up at all by the anticipation of the relief which was subsequently given by the Government of India by raising the duty on Ganjam salt and paying the cost of preventive establishments in Pooree from imperial funds. The actual demand for country-made salt was brisker in the 24-Pergunnahs and Pooree than in 1876-77, while the sales were smaller in Cuttack and Balasore.

It is impossible to compare profitably the consumption of salt for 1877-78 in the saliferous tracts, within which the rowannah system is in force, with the consumption of previous years, owing to the reduction of the area affected by that system, which took effect on the 1st April 1877. Wherever it has been found possible to compare the consumption of the two years, in the same area, the result is to show an increase, with the single exception of Noakholly, where there was a decrease owing to the effects of the cyclone upon the circumstances of the people, and possibly to illicit manufacture for home consumption by the sufferers from that calamity. It is too soon as yet to judge properly of the effects of the modifications and limitations of the rowannah system sanctioned at the commencement of the year. In Midnapore, the 24-Pergunnahs, and Backergunge, both in the still protected tracts, and in the districts as a whole of which these form a part, there was an increase of consumption, or at any rate no falling off. Chittagong shows an increase of consumption in the protected tracts, though there was a decrease in the district as a whole. Noakholly, as already noticed, shows a falling off. The population of the protected tracts, as now defined, in Cuttack and Balasore being unknown, no proper comparison can be made. The Collector of the 24-Pergunnahs considered that the measure had given a stimulus to legitimate trade. The Collector of Noakholly was not in favour of the withdrawal of the restrictions, and it has since been found necessary to extend the rowannah system again to certain parts of this district. In Cuttack the excluded area is very insignificant, and the change can have had little effect either way. In Pooree the Collector anticipated more illicit manufacture, but there are not sufficient data as yet for the formation of a trustworthy opinion. The Collector of Balasore believed that there has been no injurious effect upon the revenue, but a great part of this district is still under the rowannah system. After another year's experience a better judgment will be possible than can now be formed.

The number of seizures of salt in the saliferous tracts was 821, against 860 in the previous year, and the quantity seized was 2,894 maunds, against 878 maunds.

But, owing to the failure of one heavy case in the Howrah district, in which 1,231 maunds were released, the amount confiscated was only 671 maunds, as against 411 maunds in 1876-77; 492 maunds were under attachment at the close of the year. It is stated that, apart from the Howrah case, the results are on the whole favourable to the police; for while fewer petty cases were prosecuted, they detected a larger number of a more important character. The number

of fresh prosecutions under the salt laws instituted during the year was 1,122, as against 1,591 in 1876-77. In 1,057 out of 1,134 cases brought to trial in the year convictions were obtained, the figures for the previous year being 1,520 out of 1,599. The percentage of convictions was 95.3, against 96.5. Rs. 6,584 were realized as fines, against Rs. 9,223 in 1876-77. 48.2 per cent. of the realizations were paid away as rewards.

The decrease in cases instituted occurred in Midnapore, the 24-Pergunnahs, Backergunge, Noakholly, Pooree, and Balasore. In Howrah, Jessore, Chittagong, and Cuttack there was an increase. The decrease was chiefly in cases of illicit manufacture, and of neglect to certify sales or losses on rowannahs. In Pooree and Noakholly, however, the net decrease arose from the number of breaches of technical rules, there being an actual increase in illicit manufacture, as there was also in Chittagong. The high prices of food in Noakholly and Chittagong after the cyclone no doubt tempted the people to manufacture illicit salt. Generally speaking the offences under the salt law are not serious. The following statement shows the number of cases of illicit manufacture in each district:—

			1876-77.	1877-78.
Midnapore	...	...	122	19
Howrah	...	...	6	7
24-Pergunnahs	...	...	495	464
Jessore	...	...	1	.....
Backergunge	...	...	.....	9
Chittagong	...	...	123	244
Noakholly	...	...	26	82
Cuttack	...	...	6	1
Pooree	...	...	2	16
Balasore	...	...	8	8

Judging from the punishments, most of the cases were petty. The very small number of cases in the Orissa saliferous tracts, as compared with the 24-Pergunnahs and Chittagong, is remarkable. The sudden falling off in Midnapore leads to a doubt whether the police can have done their duty properly in 1877-78.

The return of salt conveyed into the interior shows an increase of 99,086 maunds in the quantity leaving Calcutta supply. Internal routes of salt by water and of 3,47,349 maunds in the despatches by rail; the total despatched by rail and river being 79,41,633 maunds, against 74,95,198 maunds in the previous year. These figures are, however, incomplete, and do not show the whole export from Calcutta inwards. This will be found more fully in the report on internal trade.

The falling off in the demand for bonding accommodation in Calcutta received the attention of the Board and Government, and steps were taken to make the incidence of the charges for rent more equitable with reference to the amount of storage required by each bonder, so as to induce the trade to make more use of the Government warehouses.

STAMPS.

During the year 1877-78 the income from court fees and general stamps was for the first time credited to the provincial revenues, on the understanding that these revenues should pay to the Government of India, on account of "Stamps" and "Law and Justice," the sum of Rs. 1,05,75,000, and thereafter a sum increasing by 2½ lakhs every year for four more years. Whatever sum may be obtained in excess of the amount payable to the Government of India is so much gain to the provincial revenues, which are, on the other hand, bound to make good any deficit.

The financial results of the working of the Stamp Department for the year have been very favourable. The following statement exhibits the general result for all the provinces and departments which received their supplies of stamps, other than postage, service, and telegraph stamps, from the Stamp Office in Calcutta during the past year:—

PROVINCES.	SALES IN—				Increase or decrease in 1877-78 compared with 1876-77.
	1862-63.	1872-73.	1876-77.	1877-78.	
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.
Bengal ...	51,94,421 13 6	79,70,586 12 6	93,91,694 0 6	1,06,31,662 3 0	+12,30,068
Assam ...	1,96,916 5 0	4,20,161 11 0	4,84,178 11 0	5,45,923 1 0	+61,744
Punjab ...	9,49,692 7 0	23,08,934 8 6	24,30,280 0 0	27,20,826 10 0	+2,81,546
North-Western Provinces.	19,37,852 11 4	32,93,845 3 10	36,21,363 13 10	37,42,312 0 0	+1,17,948
Oudh ...	3,30,120 8 6	8,94,017 3 0	9,41,247 7 0	10,03,553 12 0	+62,306
British Burmah	2,45,984 10 0	3,50,224 0 0	6,32,230 15 6	6,94,347 13 6	+22,116
Political Agencies.	120 11 0	7,128 5 0	5,924 8 0	5,573 2 0	—351
Port Blair ...	10 8 0	555 4 0	1,485 0 0	1,160 0 0	—325
Nepal ...	42 8 0	.....	.....	7 0 0	+7
Total ...	88,55,162 2 4	1,52,45,462 15 10	1,75,10,404 7 10	1,93,45,365 9 6	+17,84,959

Every province to which stamps were supplied from Calcutta shows a large increase of revenue. The increase for all provinces over the income of the previous year is 10·1 per cent., and in the Lower Provinces the increase is 13·2 per cent. The expansion of the stamp revenue in the Lower Provinces since 1872-73 is very remarkable. No fair comparison can be made between the revenue in 1877-78 and the revenue in 1862-63, as the rates of stamp duty were not the same in the two years.

The following table shows the gross revenue in the Lower Provinces from the sale of the several denominations of stamps during each of the last five years:—

YEARS.	DUTIES UNDER GENERAL STAMP ACT.					Duties under Court Fees Act.	Total under both Acts.
	Non-judicial stamp papers.	Special adhesive stamps.	Receipts, share transfer, and foreign bill stamps.	Hoondies or bills of exchange.	Total of general stamps.		
	Ra.	Ra.	Ra.	Ra.	Ra.	Ra.	Ra.
1873-74	16,80,605	5,22,322	1,81,687	96,731	21,81,405	56,98,956	81,80,361
1874-75	16,93,308	5,58,256	1,91,761	97,914	25,41,239	62,46,787	87,88,026
1875-76	17,71,571	5,45,353	1,86,604	99,786	26,03,314	65,79,555	91,82,869
1876-77	17,03,845	5,46,324	2,00,989	88,378	25,39,536	68,52,158	93,91,694
1877-78	18,43,199	6,03,356	2,20,508	1,10,788	27,78,351	78,53,311	1,06,31,662
Increase in 1877-78 over 1876-77 ...	1,39,354	57,532	19,519	22,410	2,38,815	10,01,153	12,39,968
Increase per cent.	8.1	10.5	9.7	25.3	9.4	14.6	13.2

There was an increase in the gross revenue from each class of stamps as compared with the receipts of the preceding year. The total increase was Rs. 12,39,968, of which, however, more than ten lakhs was contributed by court fee stamps, and the greatest portion of this increase was no doubt due to operations under the Land Registration Act. But putting aside judicial stamps, the increase in the receipts from every class of general stamps is marked: it does not in any case fall short of 8 per cent., and in the case of hoondie stamps, in which there was a serious falling off during 1876-77, the increase during the year under review was over 25 per cent.

In "Foreign Bill Stamps" only there was a falling off by Rs. 1,794, or 5.4 per cent., owing, it is believed, to the omission of native bankers to stamp their bills before they are negotiated. The prevention of fraud in connection with Foreign Bill stamps is specially difficult. The receipts from hoondies have increased 25.3 per cent., and from receipt, share transfer, and Foreign Bill stamps 9.7 per cent. The increase shown in all classes of stamps used under the General Stamp Act is very satisfactory, as it is due almost entirely to greater general prosperity and increased activity of trade. The receipts from general stamps in 1876-77 showed a considerable falling off from 1875-76, but the ground thus lost has been fully recovered in 1877-78.

The total receipts amounted to Rs. 1,06,31,662, which exceeds the aggregate sum required by the imperial Government under "Stamps" and "Law and Justice" by Rs. 56,662, and under "Stamps" proper by Rs. 7,81,662. This result is gratifying, and holds out a prospect that the provincial revenues will be able to fulfil the conditions imposed by the Government of India, with a margin of profit, though, as exceptional causes have brought about the result, it cannot yet be safely affirmed that there may not be some difficulty in providing the large yearly increase of 2½ lakhs of rupees.

As usual, the receipts in Calcutta were the highest, (but in each of the thirteen districts mentioned below the receipts exceeded three lakhs of rupees :—

DISTRICTS.		General stamps.		Court fee stamps.	Total.
		Rs.	Rs.	Rs.	Rs.
Calcutta	...	8,20,175	8,72,742		16,92,917
24-Pergunnahs	...	1,15,157	4,06,346		5,21,503
Mymensingh	...	1,17,514	3,44,963		4,62,477
Jessore	...	84,183	3,65,627		4,49,810
Dacca	...	1,19,278	3,27,611		4,46,889
Backergunge	...	79,391	2,99,824		3,79,215
Mozufferpore	...	61,401	2,91,324		3,52,725
Burdwan	...	64,224	2,68,075		3,32,299
Patna	...	91,481	2,34,029		3,25,510
Tipperah	...	62,830	2,57,881		3,20,711
Midnapore	...	61,604	2,56,094		3,17,698
Chittagong	...	69,551	2,36,905		3,06,456
Nuddea	...	54,589	2,48,326		3,02,915

In 1875-76 nine districts returned receipts exceeding three lakhs, and in 1876-77 the number fell to six, but it has this year risen to thirteen. Midnapore, Backergunge, and Chittagong, which last year produced less than this sum, have resumed their places; and Mozufferpore, Patna, Tipperah, and Nuddea have also come up to the standard. In 1875-76 there were thirteen districts in which the receipts exceeded one lakh of rupees, in 1876-77 the number was fourteen, but this year it has risen to thirty-one.

The receipts from sales of postage, service, and telegraph stamps in Bengal, Assam, the North-Western Provinces, Oudh, British Burmah, and Bhopal, also show a large increase, as will be seen from the comparative table below :—

		Postage.	Service.	Telegraph.	Total.
		Rs.	Rs.	Rs.	Rs.
1875-76	...	17,22,063	4,33,263	15,81,671	37,36,997
1876-77	...	17,47,334	4,58,061	20,04,380	42,09,775
1877-78	...	19,57,416	4,78,312	22,23,958	46,59,686
Increase in 1877-78 over 1876-77	...	2,10,082	20,251	2,24,578	4,54,911

In addition to the above, postage and telegraph stamps of the values mentioned below were supplied during the year by the Superintendent of Stamps, Calcutta, to Bombay and Madras to replenish the stocks in those presidencies :—

To Bombay.

	Rs.
Postage stamps	50,000
Telegraph „	1,25,000

To Madras.

Telegraph stamps	3,35,000
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The actual sales of stamps in Bengal, exclusive of postage, service, and telegraph stamps, amounted during the year to Rs. 1,06,31,662, as shown above. But the gross revenue, including duty on unstamped paper, adjudication fees, penalties, &c., amounted to Rs. 1,06,60,392. The charges were Rs. 2,38,069 and the refunds Rs. 50,725, leaving

a net stamp revenue of Rs. 1 03,71,598, as shown in the following comparative statement of the results of the last five years :—

YEAR.	Gross receipts.	DEDUCT			Net revenue.
		Charges.	Refunds.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1873-74	82,36,706	2,24,871	81,182	3,06,053	79,30,653
1874-75	88,51,630	2,12,029	40,599	2,53,228	85,98,402
1875-76	92,31,195	2,28,676	55,427	2,84,103	89,47,092
1876-77	94,18,536	2,26,004	39,083	2,65,087	91,53,449
1877-78	1,06,60,392	2,38,069	50,725	2,88,794	1,03,71,598
Increase of 1877-78 over 1876-77	12,41,856	12,065	11,642	23,207	12,18,149

In the above table the sale proceeds of plain paper used with court fee labels are excluded from the gross receipts, and the charges do not include the expenditure on account of recovery of stamp duty in pauper suits, which is now adjusted under "Law and Justice," and the work in connection with which has been transferred to the Legal Remembrancer.

The table below shows the number of cases in which duty was realized by civil courts and collectors respectively under Sections 20 and 24 of the General Stamp Act, and the amount of duty received :—

	NUMBER OF CASES IN WHICH DUTY WAS REALIZED BY		DUTY REALIZED BY	
	Civil Courts.	Collectors.	Civil Courts.	Collectors.
1876-77	1,185	983	619	3,721
1877-78	709	1,036	1,907	3,325

No change has been made in the different kinds of stamps in use; but as the impressed paper prepared in England is more suitable for hoondie or bill stamps than the paper now used, which is stamped in the Superintendent's Office, the Board have proposed that a supply of hoondie or bill stamps be obtained from England. This proposal is under the consideration of the Government of India.

The obsolete bi-colour judicial and non-judicial stamped papers, the obsolete Punjab tulubana stamped paper, and the blue and black non-judicial stamps of the value of one anna, have been profitably utilized by printing on them the different kinds of licenses required under the Bengal License Act.

The rates of discount allowed to purchasers of stamps, both judicial and non-judicial, have during the year been revised, and in place of the nine varying rates which have hitherto prevailed only three rates have been laid down, namely $1\frac{9}{16}$, $3\frac{1}{8}$, and $4\frac{1}{16}$ per cent., representing respectively 1, 2, and 3 pice per rupee. This change will tend to simplify calculations and reduce the unnecessarily high rates of discount heretofore allowed for some classes of non-judicial stamps.

The prosecutions for infractions of the stamp law were attended with favourable results. Out of 269 persons who were tried during the year, 223 were convicted and only 46 acquitted. The fines realized amounted to Rs. 2,591-2, out of which the sum of Rs. 152-8 was paid to informers.

PROVINCIAL PUBLIC WORKS CESS.

To enable the Government of Bengal to discharge the contribution levied on it by the Government of India on account of interest on capital expenditure for extraordinary public works (railways and canals) the provincial public works cess was imposed under Act II (B.C.) of 1877. This Act, which empowers the local Government to levy a cess on immovable property and to apply the proceeds thereof to the construction, charges, and maintenance of provincial public works, came into operation on the 13th June 1877 in all the districts in Bengal in which the Road Cess Act X (B.C.) of 1871 was in force. The contribution to be paid to the supreme Government for 1877-78 was at first fixed at Rs. 27,50,000; but that Government, recognizing the fact that the Act had not come into force from the beginning of the year, and that the full year's rates could not be collected during the year, reduced the demand to 20 lakhs. The actual receipts under the Act up to 31st March 1878 amounted to Rs. 21,05,037-12-1.

For convenience of collection the public works cess year has been made coincident with the road cess year, which runs from 1st October to 30th September.

The expenditure incurred on account of the introduction of the Act in the several districts may be distributed into two periods—(1) Rs. 11,238 up to the 31st March 1878, when the amalgamation of the establishments for the collection of the cesses under this Act and the Road Cess Act took effect; (2) Rs. 2,417, the expenditure incurred, or required to be incurred, from that date up to the end of the cess year 1877-78. The expenditure incurred up to the 31st March 1878 varied widely in different districts. Some districts employed scarcely any extra establishments, others entertained very large establishments, according as the road cess establishment was ample or scarcely able to cope with the work imposed on it by the one cess alone. It is, however, evident that some expenditure was unavoidable, as not only had a vast number of special notices to be served, but also the mechanical labour of keeping the accounts was almost doubled, and over 20 lakhs of rupees were actually collected from land cess alone. The cost of working the Act scarcely exceeded one half per cent.

The expenditure incurred from the 31st March 1878 to the end of the cess year 1877-78, which amounts to Rs. 2,417, is inconsiderable.

From 1st October 1878 all temporary expenditure will cease, and it is hoped that permanent arrangements will be made by the same establishment for the collection of both cesses. It is evident, however, that the number of payments on account of the two cesses will considerably exceed the number of payments on account of road cess alone, and in some districts, especially such as have weak *torjih* and treasury establishments, some additional establishment will be required at *kist* time.

The question whether in future the joint establishment for collection purposes should be borne rateably by the road cess committees and provincial revenues was under the consideration of the Government when the report was being drawn up.

The following statement shows the demands, collections, and arrears of the public works cess for the cess year 1877-78:—

DISTRICTS.	Demand.	Collections.	Arrears.	Remissions.	Net arrears.
	Rs.	Rs.	Rs.	Rs.	Rs.
Burdwan ...	1,81,987	1,71,975	112	.....	10,012
Bankoora ...	18,372	15,743	2,629	.....	2,629
Beerbhoom ...	37,735	37,285	450	.....	450
Midnapore ...	1,41,404	1,03,650	40,754	.....	40,754
Hooghly ...	73,833	63,965	9,868	.....	9,868
24 Pargunnahs ...	1,08,345	1,00,456	7,889	.....	7,889
Nuddea ...	70,596	65,628	4,968	.....	4,968
Jessore ...	1,01,950	85,078	16,912	.....	16,912
Moorshedabad ...	78,705	70,651	2,054	.....	2,054
Dinapore ...	75,485	59,603	15,882	.....	15,882
Rajshahye ...	80,298	77,349	2,949	.....	2,949
Rungpore ...	1,25,152	1,14,418	10,734	.....	10,734
Bogra ...	33,609	28,616	4,993	.....	4,993
Pubna ...	43,545	31,644	11,901	.....	11,901
Darjeeling ...	16,610	14,546	2,064	.....	2,064
Julpigore ...	28,769	28,404	365	.....	365
Dacca ...	60,146	50,779	9,367	.....	9,367
Farredpore ...	50,049	36,813	13,236	.....	13,236
Backergunge ...	1,94,143	1,18,834	75,309	.....	75,309
Mymensingh ...	1,41,040	1,07,708	33,338	.....	33,338
Tipperah ...	93,671	90,834	2,837	.....	2,837
Noakholly ...	77,336	61,027	26,309	.....	26,309
Chittagong ...	89,797	49,570	40,227	.....	40,227
Patna ...	1,69,778	1,40,681	19,097	.....	19,097
Gya ...	1,99,138	1,72,733	26,405	.....	26,405
Shahabad ...	1,48,093	1,22,613	25,480	472	25,008
Mozufferpore ...	1,40,698	1,05,382	35,316	12	35,304
Durbhunga ...	1,69,110	1,53,005	16,105	.....	16,105
Sarun ...	1,53,996	90,882	63,114	.....	63,114
Chumparun ...	75,286	70,554	4,732	.....	4,732
Monghyr ...	94,691	86,245	7,846	.....	7,846
Bhagulpore ...	1,22,479	1,13,686	8,793	.....	8,793
Purneah ...	71,035	65,618	5,417	.....	5,417
Maldah ...	24,738	20,054	4,684	.....	4,684
Cuttack ...	54,449	44,811	9,635	.....	9,635
Pooree ...	23,634	23,634	.....	.....	.....
Balasore ...	25,800	17,265	8,535	.....	8,535
Hazareebagh ...	30,949	29,781	1,168	.....	1,168
Lohardugga ...	45,825	42,402	3,423	.....	3,423
Manbhoom ...	34,656	27,081	7,575	.....	7,575
Total ...	34,99,338	29,06,036	5,92,402	484	5,91,918

The total demand under the Road Cess Act for the year was Rs. 30,63,845, or Rs. 4,35,493 less than the demand under the Public Works Cess Act. The cause of the public works cess demand exceeding the road cess demand is due to many districts collecting road cess at less than the maximum rates, whereas the public works cess is levied at the uniform maximum rate of half an anna on the rupee.

VI.—VITAL STATISTICS AND MEDICAL SERVICE.

Registration of Births and Deaths.

THE number of deaths registered during the year 1877 was 1,077,601, as against 983,400 in 1876 and 600,104 in 1875. This increase is held to be due to improved registration, and the Sanitary Commissioner points to the increase in the percentage of deaths since 1870 as proving the progress made in accuracy of registration.

The figures are as follow :—

	Death-rate per 1,000.		Death-rate per 1,000.
1870	... 3.92	1874	.. 8.42
1871	... 4.00	1875	.. 10.01
1872	... 5.81	1876	.. 16.40
1873	... 7.75	1877	.. 17.96

There is no doubt that the increase in the percentage of deaths is chiefly due to greater completeness of registration; but, on the other hand, it should not be forgotten that the reports on which these figures are founded are made by persons in whom confidence in such matters cannot be placed when they are freed from supervision, and that the amount of trustworthy supervision that can be exercised over them is limited.

An increase in the percentage of deaths may as easily be caused by falsification of returns as by increased care and attention on the part of village chowkidars and subordinate officers of police. The Sanitary Commissioner expresses doubts as to whether the returns are falsified to any material extent, but he is not yet prepared to give a confident opinion on the subject. It has been pointed out to him that the matter is one which should occupy his earnest attention, and that the Government expects to receive a definite assurance from him on this subject.

The number of births registered was 1,061,054, and it is no doubt satisfactory to find at the outset of the scheme so large a birth-rate as 18.20 per 1,000 of population. At the same time the advantages to be obtained by the imperfect registration of births are of so doubtful a nature that Government has thought it best to confine the registration of births for the present to certain municipalities.

It is admitted that there is no prospect for an indefinite period of making the registration of deaths so accurate that the results will be useful for scientific purposes; but it has been urged that a progressive improvement may be expected, and that at any rate the proportion of deaths reported from year to year will be the same or nearly so, and that even the proportion of deaths due to each more fatal form of disease will be the same, and that consequently Government will be in a position from year to year to deduce the healthiness or unhealthiness of any particular season, and the prevalence or absence of any particular form of disease. There is some force in these arguments, but it is very much weakened by the theory of progressive improvement of registration. If the total number of deaths, or the number of deaths from any particular disease, in any year greatly exceeds the average, it can neither be said that the year has been an unhealthy one, nor that the particular disease has been specially fatal, because the element of improved registration presents itself, and it cannot be known how far the increase may be due to it. As a matter of fact, the question of the healthiness of any year has never yet been decided by the recorded number of deaths. The question of healthiness is decided on general considerations; and, so far as the statistics of mortality do not agree with the decision so arrived at, they are put aside and the increase ascribed to improved registration.

This was the course followed as regards 1876, when the number of deaths increased at a bound from 600,104 to 983,400; and though the increase was ascribed to improved registration, it is not certain that that is the only, or even the chief, cause of the increase.

Nevertheless there are certain conclusions, of a certain amount of value, which can, with more or less confidence, be drawn even from imperfect statistics of mortality; but this cannot be said of imperfect statistics of births. The number of births in any month, unlike the number of deaths, is no criterion of the state of the people in that month. The causes of death are various, and admit of conclusions being drawn from the special prevalence of any one of them; but no similar investigation is possible in the case of births. In the past year the number of births registered was 18.70 per 1,000, and it is believed that the real number was twice as great. Next year the number registered might be 20 per 1,000, and in succeeding years it might even rise to 30 per 1,000; but even in that case no useful purpose would have been served, and no useful information gained. Under the circumstances, the attempt to secure the general registration of births has been deferred, and all efforts are being concentrated on conducting the system for the registration of deaths on an improved and matured plan.

Several instances have come to the notice of Government in which the incomplete statistics now obtained have been employed to support erroneous conclusions, and it is good policy not to extend the sphere of operations until greater accuracy has been attained in the statistics which are now being collected.

Special arrangements have been made to secure in future accurate statistics of the sickness and mortality among sailors in the port of Calcutta.

The registered deaths from cholera were 155,305, as against 196,390 in 1876, and the province may be held to have not suffered from cholera in any unusual degree during 1877. The quality of the registration of deaths, however, varies widely from district to district. In Sarun the deaths per 1,000 are 8·80, in Noakholly they are 36·21, and there is a regular gradation from Sarun to Noakholly. It is therefore absolutely certain that even if registration be nearly perfect in Noakholly it deteriorates from district to district, till in some cases only half, or one-third, or even one-fourth, of the number of deaths from each disease is shown.

The number of deaths from small-pox registered was 8,088, against 10,746 in 1876. The Sanitary Commissioner points out that the mortality from this disease is much less in Bengal than in any other province, and the figures* are remarkable, even when allowance is made for the fact that registration appears to be more thorough in some provinces than in others, and that deaths may occasionally be ascribed to wrong diseases.

The registered deaths from fever were 711,037, as against 561,530 in 1876. The death-rate for the province was 11·85 per thousand; but considering how incomplete the registration is in many districts, it is clear that an average for the whole province can possess no accuracy in itself, and cannot even be very valuable for comparison with the results of previous years.

The Sanitary Commissioner gives the following figures for Bengal, Behar, Orissa, and Chota Nagpore:—

		Rates per 1,000.		Rates per 1,000.
Bengal	...	13·93	Orissa	7·55
Behar	...	9·55	Chota Nagpore	9·26

He draws from this the conclusion that fever was most prevalent in Bengal, least in Orissa, and that Behar and Chota Nagpore suffered in an intermediate degree; but as the quality of the registration is by no means uniform for these provinces, the figures do not justify this conclusion, though probably the conclusion may in itself be correct.

Emigration.

EMIGRATION to the colonies received a remarkable impulse during 1877-78, partly, no doubt, from the well-directed measures of the Emigration Agents, but mainly owing to the scarcity in Oudh and the North-Western Provinces, whence the larger proportion of the supply of colonial emigrants is usually drawn. In consequence of the combined operation of these causes, the number of emigrants actually despatched rose from 7,734 in 1876-77 to 18,488 in the past year. In view of this extraordinary activity of recruiting operations continuous efforts were made by Government to guard against abuses, one important step taken being to require all unauthorized sub-agents to take out licenses as recruiters, so as to bring them within the control of the law. The attention of the District Magistrates was also drawn to certain points in respect of which their careful co-operation is essential to the success of emigration, and a variety of minor reforms have been, or are being, introduced with the object of providing for the health and comfort of the emigrants during their stay in Calcutta and on the voyage to the colony for which they have engaged.

Under the orders of the Government of India some important alterations were made during the year in the rule which regulates the proportion of female to male emigrants, the object of the modifications being to reduce the number of women despatched during the monsoon months, when the voyage is supposed to be more trying to weak persons, and increase the number shipped later in the season. Some practical difficulty has been found in enforcing the new rule, and in the case of the colony of Guadeloupe it has been relaxed for the present season.

Nine emigration agencies were at work during 1877-78, being three more than in the previous year. This increase was due to the opening of agencies for the three colonies of Jamaica, Grenada, and St. Lucia. The emigration business of these colonies, together with that of Trinidad, was, however, transacted by a single agent, and a similar arrangement was followed during the past year for the colonies of Demerara and Natal. Mauritius, Surinam, and Guadeloupe, had separate agents. Thus the work of the nine agencies was, in fact, conducted by five agents, two of whom were members of mercantile firms in Calcutta. It is to be feared that the supervision of the detailed work of an emigration

Agencies at work.

agency cannot always be properly attended to by gentlemen who are occupied with important business on their own account; and in the event of the emigration to Guadeloupe and Surinam increasing, it may be necessary to recommend that separate and independent agents be appointed.

In 1876-77 the number of admissions to dépôts was 9,417, while in the past year they rose to 22,554. Nor was this due merely to the opening of the three fresh agencies and to the resumption of operations by the Surinam agency, from which no emigrants were despatched in the previous year. These causes accounted for only 2,963, or less than one-fourth of the total increase, the balance being due to the greater number of admissions to existing dépôts. Thus Demerara recruited 9,688 emigrants, against 4,746 in 1876-77; while Mauritius collected 3,044, against 1,274, and Guadeloupe 2,733, against 441. That this conspicuous rise in the number of admissions should have been attended by some enhancement of the death-rate was no more than might have been expected, looking to the circumstances under which many of the emigrants were recruited. During 1876-77 9,417 coolies were received into the dépôts. Forty out of the number died, showing a death-rate of 4·20 per thousand. In the past year 168 emigrants died out of 22,544 admitted, representing a death-rate of 7·40 per thousand. The Mauritius dépôt, as usual, showed a greater mortality than the other dépôts, which is said to be partly due to the fact that its chief recruiting ground is Behar, where the emigrating classes are sickly and anæmic. In the Guadeloupe dépôt also a high mortality and a large proportion of Behari emigrants were found to be coincident.

The proportion of infant mortality was undoubtedly high. Out of the 168 deaths which occurred in the dépôts, 109, or 65 per cent. of the total, were those of children, while among adults there were 59 deaths, being 35 per cent. of the recorded mortality. In the Guadeloupe dépôt the death-rate among infants amounted to 10 per cent. Inquiry will be made into the circumstances attending this heavy mortality, and the Government will endeavour to introduce some special precautions against its recurrence. In the case of infants proper and timely feeding arrangements would probably prevent any great mortality. Cholera and diarrhœa caused the largest number of deaths, and these are the diseases which would most naturally be induced among coolies by the journey from their homes to Calcutta, and their change of food and of habits of life. Small-pox, however, caused 18 of the deaths, and chest affections 21. In consequence of medical examination in the districts of recruitment not being compulsory under Act VII of 1871, a large number of coolies on arriving at the dépôts were found to be physically unfit to emigrate.

Although the average period during which coolies were detained in dépôt before emigration fell from 29 days in 1876-77 to 25 days in 1877-78, cases of exceptionally long detention occurred in the dépôts of the Jamaica, Guadeloupe, and Surinam agencies. In the two former the detention was due to disease among the emigrants, but the Surinam coolies were detained by the non-arrival of the steamer which had been chartered to convey them.

During 1876-77 recruiters' licenses were granted to 306 persons, while in the past year, although the number of intending emigrants more than doubled, the number of licenses granted was not above 375, being an increase of only 69. Eighty-six licenses granted at the end of 1876-77 continued in force during the next season, so that in fact 461 licensed recruiters were at work. Although many of these recruiters worked only for a few months of the year, each of them recruited on an average no less than 48 emigrants. As the recruiters employed in inland emigration, although they work all the year round, obtain an average of only 14 coolies a-piece, the inference was suggested that illegal recruitment is more largely resorted to in colonial than in inland emigration. There is some reason to believe that the numbers of colonial emigrants are swelled by the transfer to colonial recruiters of coolies already collected in inland depôts; and this practice has since been disallowed by Government. But excluding this special mode of obtaining emigrants, the comparative paucity of the numbers recruited by the recruiters for the tea districts is sufficiently accounted for by the excessive competition for coolies of the class most sought after, and by the fact that the districts in which recruitment for inland emigration has hitherto been mainly carried on are far less thickly peopled than those to which colonial recruiters resort. The orders requiring sub-agents to take out recruiters' licenses are stated to have produced a good effect, and greater vigilance was shown by the registering officers in recruiting districts.

Inquiry was made during the year into the truth of a statement that although the right to a return passage is unconditionally guaranteed to Indian emigrants in the French colonies by the convention executed between the French and British Governments in 1861, that right is liable to forfeiture under an earlier local law if the emigrant has undergone criminal or corrective condemnation in the local courts. It was stated by the Governor of Guadeloupe that this provision was still in force, but that in practice no recourse was had to it, and that return passages were always granted to immigrants who applied for them, whether they had been condemned or not. The Guadeloupe administration, however, expressed their willingness to repeal the obnoxious section. The Government of India was addressed with the view of bringing the law into harmony with the convention.

In 1875-76 the number of emigrants indentured for by the colonies who receive emigrants from India was 12,965 statute adults, and the number actually despatched was 7,138½ statute adults, or 7,734 persons. In the past year the demand of the colonies rose to 15,036 statute adults, and this was more than complied with by the despatch of 16,092 statute adults, or 18,488 souls. Out of 18,488 persons who emigrated during the year 306 were returned emigrants, who in most cases went back to the colony where they had previously served.

In reviewing the reports on colonial emigration for the years 1875-76 and 1876-77, the attention of the Protector of Emigrants was directed to the discrepancies between the number of emigrants registered as shown in the

Recruitments.

Grant of return passage.

Number of emigrants despatched.

Registration.

returns furnished by district officers and the number reported by the Emigration Agents as having arrived in Calcutta. A circular was also addressed to Magistrates of recruiting districts in Bengal, and the Government of the North-Western Provinces was requested to issue instructions to officers subordinate to it. It was hoped that these measures would enable the Protector to detect the irregular operations of unscrupulous recruiters in future, but the returns of 1877-78 did not show any improvement in this respect. The reports received from the Magistrates during the past year showed that 21,356 emigrants were registered in the districts, while 22,544 were actually admitted into the depôts. There was no evidence to show that the excess number of 1,188 were ever registered at all. According to the reports of the Emigration Agents the number recruited in the districts and registered was 23,476, showing that 2,120 persons were unaccounted for by the local officer's returns. The provisions of the law on the subject appear, however, to be sufficient if properly enforced.

The following statement explains how it was that although 22,544 emigrants were received into the depôts only 18,488, or 82 per cent., were actually despatched to the colonies :—

Admitted into depôt	...	...	...	22,544
Rejected as unfit to labour or as dependent on emigrants unfit to labour	...	...	...	1,737
Unwilling to emigrate	...	...	...	155
Claimed by relatives	...	...	...	49
Deserted	...	...	...	1,037
Died	...	...	...	168
Total casualties	...	...	...	3,146

The difference between the number "admitted and the number despatched is 4,056, of which 3,146 persons were accounted for by the causes detailed above, while the remaining 910 were described by the Protector as forming an "unrequired surplus at the end of the season."

Of the 1,737 persons rejected as unfit to labour or as dependent on persons unfit to labour, 977, or 10·10 per cent., of its admissions were rejected by the Demerara Agency; 186, or 6·59 per cent., by Trinidad; and 78, or 15·47 per cent., by Surinam. It was stated, moreover, that the agents for Demerara and the West Indian colonies employed medical men to examine intending emigrants in the recruiting districts, and had made every effort to reduce the number of rejections. Orders were issued for a further inquiry into this matter. The agents are said to give liberal allowances to the medical men who conduct the examinations; but it was evident from the large proportion of rejections in Calcutta that the examinations in the districts must have been most cursory and insufficient.

In the case of Surinam the very high proportion of rejections was explained by the anxiety of the Dutch Government to obtain thoroughly healthy emigrants; and the results of this stringent selection were so far satisfactory that the mortality on the voyage and on arrival of Surinam was unusually low. But if an exceptionally high standard is to be insisted upon, a more thorough medical examination of the emigrants should be made in the districts where they are recruited. The hardship of bringing down a large number of men from their homes and then rejecting them to return home worn-out and disappointed is very great, and constitutes an abuse which must be brought under control.

The proportion of persons who declined to emigrate after admission into depôt was small in all the agencies except that of Surinam, where it amounted to 3·96 per cent. It was stated in explanation of this that "their number was considerably augmented by a batch of dancing-girls and women of a similar description, with their male attendants. These people laughed at the idea of becoming agriculturists." This circumstance seemed to indicate that very imperfect supervision was exercised over the recruiting staff of that agency, and the Protector was told to consider whether licenses should be granted again to the recruiters who were concerned in this very injudicious selection of intending emigrants. It was also observed that the desertions from the Surinam depôt amounted to 10·59 per cent. of the number admitted. The Agent considered that this was due to an unusually long detention in the depôt (the average period of detention was 47 days), to the prevalence of very high wages in Calcutta, and to an intrigue between some designing coolies and door-keepers at the depôt. A practice was also detected of entering as deserters the ineffective relatives of coolies who died in hospital, while in fact these people were frightened or driven away from the depôts. The Protector was requested to investigate strictly every case of desertion, as there was reason to believe that the class of men who are usually employed in the offices and as servants at coolie depôts need very close supervision. None of the coolies admitted into the Mauritius depôt declined to emigrate, but, on the other hand, no less than 344, or 11·24 per cent., deserted. The Agent was called upon to explain how it was that not one of the 344 persons who thus practically shewed themselves unwilling to emigrate made any formal application for release from engagement.

The rule requiring the shipment of at least 40 women for every 100 men was complied with during the year by all the agencies except those of Mauritius and Guadeloupe. The returns for Mauritius showed a deficiency of three, and those for Natal of 42, which will be made up during the current year. Guadeloupe started with a deficit of 192, and made up only 11; so that 181 women beyond the standard proportion remain to be supplied in the present season. The Protector was instructed to see that the Guadeloupe agency carries out the requirements of the rule. The Demerara agency, which commenced the year with a deficiency of 40, has since embarked the proper proportion.

The following statement shows the provinces from which the emigrants despatched to the colonies were recruited during the last two years :—

Sources of supply.

	1876-77.	1877-78.
North-Western Provinces and Oudh	4,279	13,254
Behar	2,446	3,038
Bengal	470	268
Madras, Bombay, &c.	266	1,594
Native States	94	41
Punjab and Dependencies	51	69
Central India	108	197
Orissa	20	18
Total	7,734	18,488

It will be observed that the number of persons from the North-Western Provinces and Oudh who emigrated to the colonies was nearly trebled in the past year. As the increase in emigration from Behar was no more than proportioned to the enhanced demand of the colonies and the vigorous recruitment which went on to make up for the deficient supply in 1875-76, it may be concluded that the 'distress which prevailed in Oudh and in parts of the North-Western Provinces formed a strong inducement to emigration in 1877-78. In Bengal itself the number of emigrants, always small, showed a considerable decrease. "As regards emigration from Madras and Bombay, it must obviously be quite exceptional for natives of those presidencies to emigrate through Calcutta; but even in this case the famine had its effect in raising the number of these casual emigrants from 266 to 1,594.

During 1877-78 no fewer than 37 sailing ships and one steamer left the port of Calcutta with emigrants, against 18 vessels in the previous year. The average number of emigrants conveyed in each ship was 486. Of the 26 vessels for which detailed information was available, the *Botanist* and the *Jorawar* showed the highest rate of mortality, 4·62 and 4·56 per cent. respectively. The most successful voyage was made by the steamer *Clive*, which took 324 emigrants to Surinam without a single death. It is not quite clear, however, why the passage should have occupied so long as 77 days. In 1872 the steamer *Enmore* ran from Calcutta to Demerara in 49 days, and it was stated that the distance would have been accomplished even sooner if the vessel had been supplied with good coal and had not met with headwinds in rounding the Cape of Good Hope. A proposal was made during the year by the Government of Demerara to employ a steamer in the transport of emigrants to that colony, and an opinion was expressed by the Government as to the class of vessel which should be built. The highest mortality was on a vessel which had been used for carrying salt on the previous voyage and remained damp accordingly. The agents have been instructed to avoid chartering salt ships for emigrants.

As many as 2,544 emigrants returned from the various colonies in 1877-78, bringing with them acknowledged savings in money amounting to Rs. 4,72,926, or an average of Rs. 185 per head. In addition to this many of them

Return of emigrants.

possessed valuable jewellery. The Emigration Agent for Trinidad placed on record some remarkable instances of the successes of Indian immigrants in that colony, and forwarded an extract from a report by a Moravian Missionary furnishing satisfactory evidence of the material prosperity of immigrants in Demerara. It is curious to note that three Indian coolies run thorough-bred horses in the local races, frequently winning prizes to a considerable amount. In the town of San Fernando 22 of the burgesses are men who were originally ordinary Indian coolies, and one of them died lately leaving a fortune of Rs. 1,34,000. On the other hand, among the great mass of the coolies there is said to be much drunkenness and want of cleanliness, with a tendency to imitate the lazy habits of the Creole or Negro labourers. It is also gathered from the colonial report for 1877, lately received, that in Trinidad the number of Indian children at school is not so great as it should be.

Inland emigration also received a marked impetus during 1877-78; the total number of intending emigrants registered during the year for transmission through contractors' depôts being 24,864, against 17,851 in 1876-77. Of these, 18,377 were registered by contractors' recruiters, and 6,487 were registered by garden sirdars. Out of the total number registered 17,402 only arrived at their destination, the original number having been reduced through deaths, desertions, rejections, discharges, and detentions in depôt at the close of the year.

The number of licensed contractors rose from 19 in 1876-77 to 26 in the past year. This increase was mainly due to the establishment of depôts by some large Calcutta firms who are interested in tea estates. These depôts are under the supervision of Europeans, and the subordinates employed appear to be efficiently controlled. It is most desirable that the business of supplying labour for Assam should be carried on by persons who are themselves interested in the success of the tea gardens, instead of being managed by contractors who have no motive to look to beyond the market price to be obtained for coolies; and it would be well if all the inland emigration depôts were in the hands of firms whose commercial reputation would be some security for straightforward dealing and careful observance of the law.

There was a considerable decrease in the number of recruiters' licenses granted, which fell from 842 to 780. Thirty-two licenses were cancelled for misconduct.

The Superintendent of Emigration observed that the proportion of recruiting licenses cancelled affords a fair indication of the amount of supervision exercised by the contractor, and directed attention to three cases in which contractors, whose licenses have been withdrawn, had evidently employed a very bad class of recruiters.

The number of emigrants recruited by licensed recruiters and passed through contractors' depôts amounted to 18,377, against 13,539 in the previous year. Of this number Chota Nagpore contributed 32.24, the 24-Pergunnahs 14.11, Shahabad 6.58, and Raneegunge 6.42 per cent. The large proportion registered in the 24-Pergunnahs was

remarkable. It is well known, however, that large numbers of day-labourers in Chota Nagpore leave their homes in the cold weather and come to Calcutta in search of work, and it is not improbable that many of the emigrants registered at the 24-Pergunnahs were recruited from among the Dhangurs employed on road work in and around Calcutta. The high prices of food in Manbhoom led to a very marked increase in emigration from that district. The numbers coming from Shahabad probably were in like manner swelled by the influx of labourers from the districts of the North-Western Provinces, where pressure was being felt.

Of the 18,377 souls registered by licensed recruiters, only 17,743, including an infant born on the way, eventually reached the depôts in Calcutta. The balance of 635 was thus accounted for:—

Detained in mofussil depôts	...	152
Discharged	...	103
Absconded	...	327
Left behind on the journey to Calcutta	...	43
Died	...	10
Total all causes		635

In the case of one contractor, out of 1,645 coolies collected in the mofussil only one deserted on the journey to Calcutta. The Superintendent attributed this to the fact that the majority of his coolies, though registered by recruiters, were really collected by garden sirdars whose certificates expired before they could register their coolies. If this is a correct account of the matter, it shows that garden sirdars, if properly looked after, can secure a superior class of coolies far more readily than the professional recruiters.

The second class of emigrants, consisting of coolies registered by garden sirdars and forwarded to the tea districts through contractors' depôts, rose from 4,313 in 1876-77 to 6,487 in the past year, the majority of them coming from Chota Nagpore. Only 6,325, however, were received into depôts in Calcutta, the reduction in numbers being due to the following causes:—

Detained in mofussil depôts	...	...	...	...	...	29
Discharged	...	...	...	...	...	2
Left behind on the journey to Calcutta	...	...	...	...	...	9
Absconded	...	...	...	...	...	67
Died	...	...	...	...	...	55
Total all causes						162

Although the proportion of casualties among the sirdari recruiters' coolies was about one per cent. less than among the regular recruiter's coolies, it rose considerably during the past year. Out of the 67 desertions recorded, 44 occurred among the coolies forwarded by two ordinary contractors, Mr. Hendry and Baboo J. N. Dutt.

The total number of emigrants admitted into the Calcutta depôts was 17,743 of the first class and 6,325 of the second class of coolies, or 24,068 altogether, against 19,476 in the previous year. While in depôt the number

Rejections.

was largely reduced by the process of weeding out coolies physically unfit to emigrate, by discharge, by desertion, by death, and by detention in hospital, so that only 18,480 were actually passed for embarkation to Assam. The number of emigrants rejected as physically unfit was 869, or 3·61 per cent.; 334 healthy dependents, or 1·38 per cent. more of those admitted, having to be returned to their homes in consequence. The total of both in 1876-77 was 3·60 per cent. In explanation of this unusually high proportion of rejections it was stated that the medical examinations in Calcutta were peculiarly strict during the past year, in consequence of complaints that many coolies physically unfit for work had been recently sent up to Assam. It was also suggested that in many cases the infirmities which led to rejection arose after the first medical examination in the mofussil, or were latent when that examination was conducted. But it is hardly possible that these considerations can account for more than a small proportion of the 869 cases in which emigrants, after having been pronounced healthy by the district medical authorities, were subsequently rejected by the medical inspector in Calcutta. It is clear that these results point to some serious defect in the present system. The Superintendent has been directed to take up the question carefully, and, after consulting the medical inspector and the district medical officers, to submit a special report on the causes of the numerous rejections in the past year, and the measures which should be adopted to secure in future a reasonably uniform test of health and fitness to labour, and its application at the earliest possible point, viz. in the recruiting districts. It is possible that sickly men are substituted in some instances for the men passed by the district medical officers. Meantime the medical officers of the districts most largely affected by rejections have been called on for explanation.

The proportion of desertions among coolies detained in dépôt fell from 6·27 per cent. to 4·18 per cent., the figures being 1,007 in 1877-78 to 1,227 in 1876-77. They were still very high, and the reduced total is mainly accounted for by the small number of desertions from the dépôts of two contractors who are now largely employed in forwarding coolies recruited by garden-sirdars. The numbers discharged for various causes were 892 = 3·7 per cent., against 770 = 3·96 per cent. in 1876-77. Many of the discharges are accounted for by the refusal of whole gangs to proceed if one relative is rejected.

There were 315 deaths, giving a mortality of 1·30 per cent. in the dépôts during 1877-78, against 95, or 0·48 per cent., in the previous year. The medical inspector attributed this increase in the mortality to the prevalence of scarcity in the area from which the emigrants were recruited. It is very possible that the high prices generally prevalent pressed heavily upon the labouring castes, to which the bulk of the emigrants to the tea districts belong, and reduced their physique. There was severe mortality from cholera, especially among the Dhangur coolies, reaching in one dépôt the figure of 7·00 per cent. The average number of days' detention in dépôt was 13.

In the following table the two classes of emigrants received into the depôts are compared :—

	Total number in depôts.	Daily average strength.	Daily average sick.	Transferred to other depôts.	REJECTED.		DISCHARGED.		ABSCONDED.		DIED.		Total passed as emigrants.	Forwarded to Goalundo.	Remaining in depôt.	Unaccounted for.
					Number.	Percentage.	Number.	Percentage.	Number.	Percentage.	Number.	Percentage.				
Class A ...	17,743	23.64	2.55	479	923	5.19	760	4.28	914	5.15	153	0.87	14,513	13,175	1,042	115
Class B ...	6,325	26.98	2.89	17	281	4.44	132	2.08	93	1.47	162	2.56	5,640	5,305	738	80

During detention at Goalundo 185 deaths occurred, and the mortality, especially among children, is stated to have been heavier than in the preceding year. This was attributed to the general prevalence of cholera, and to the increase of what may be styled emigration by families. As a general rule it will be found that the mortality among a body of emigrants varies directly with the proportion of children, and this will be more marked in a year when cholera is rife. The casualties from all causes at Goalundo were 349, and 300 were left in depôt at the close of the year. The casualties stood thus for the different classes :—

Contractors' coolies	...	...	...	1.25 per cent.
Sirdari coolies passed through contractors' depôts	...	...	...	1.07 ditto.
Ditto proceeding independently	...	...	...	4.80 ditto.

The mortality among the sirdari gangs coming under the cognizance of the Superintendent on account of their having to be conveyed by steamer to Assam was very heavy, owing to the ravages of cholera among Dhangur coolies.

Altogether 12,999 coolies of the first class and 5,123 of the second were despatched to the tea districts through the agency of the Emigration Department. Their destinations were as follow :—

							Class I.	Class II.
Assam	...	...	...	...	...	...	11,049	3,969
Cachar	...	...	...	...	...	...	1,699	1,075
Sylhet	...	...	...	...	...	...	251	79
Total							12,999	5,123

Besides the above, despatched through the agency of contractors, the Superintendent at Goalundo had cognizance of 2,349 purely sirdari coolies going to Assam. Of gangs going to Cachar or Sylhet he takes no cognizance.

Of 17,367 persons despatched to Assam, 468, or 2.69 per cent., died on the way; as against 1.46 in the year preceding. Cholera caused 297, or 1.71 per cent., of the deaths. The following statement shows the most important

Casualties on the voyage.

particulars in connection with the emigrants who were conveyed to Assam by the regular steamer service during the last two years:—

			1876-77.	1877-78.
Total number of trips	...	...	71	63
Ditto ditto without cholera	...	...	53	35
Ditto ditto souls conveyed	...	...	14,646	17,367
Average percentage of total deaths	...	...	1.46	2.69
			Days. Hours.	Days. Hours.
Ditto length of passage	...	...	16 19	18 17
Ditto number carried each trip	...	...	200	275

The results of the operations in the past year were in every respect less satisfactory than those of 1876-77, but there is now a fair prospect of the main stream of emigration being diverted from the river route to the Northern Bengal State Railway. It is probable that mortality rises proportionately to the average number of persons carried, which, it will be observed, was considerably greater than in the previous year. There is also good reason to believe that coolies stand a better chance on board a flat than on board a steamer. On the former there is less crowding in wet or cold weather, and the temperature is more equable, though the passage occupies a slightly longer time. It is also stated that the scale of diet now in force on board the steamers is too liberal for the aboriginal coolies from Chota Nagpore, who are apt to eat to excess, and thus induce forms of stomachic derangement which are liable to end in cholera. The precise cause of the outbreaks of cholera on board these river steamers is at present uncertain. Apart, however, from all theories of causation, it is obviously imperative to neglect no precaution in the way of providing good water and wholesome food, and to prevent the coolies from using water which may have been in any way polluted. It may be observed, however, that the fact of cholera having on several occasions attacked the passengers, crew, and attendants, and having broken out severely among some emigrants proceeding to Cachar in country boats, seems to tell against the opinion that the disease is solely propagated by pollution of the water-supply specially provided for emigrants.

With regard to the third class of emigrants, who are recruited by garden sirdars and conveyed to the tea districts without entering the dépôt of any contractor, there is no complete or accurate return. Except as regards those shipped at Goalundo for Assam, they have been excluded altogether from the foregoing paragraphs. It would appear that during the past year 11,345 coolies were registered by garden sirdars and transmitted *via* Goalundo, and that of this number 11,042 embarked—2,349 for Assam, 7,186 for Cachar, and 1,507 for Sylhet. The information as to the districts from which these emigrants came is admitted to be imperfect, but a large proportion came from Shahabad, a district which has hitherto contributed but slightly to inland emigration. It is believed that the impulse given to emigration from Shahabad during the past year was mainly due to the pressure of high prices in neighbouring districts. But there is, under the circumstances, room to doubt whether the agents by whom the Shahabad emigrants were recruited were really garden sirdars of the character contemplated by the Act.

The number of contractors' coolies sent to Cachar and Sylhet fell off during the year. But the demand for sirdari coolies in these districts is increasing.

The following statement gives the chief facts with reference to emigration to Cachar and Sylhet :—

	CACHAR.					SYLHET.				
	Men.	Women.	Children.	Infants.	Total.	Men.	Women.	Children.	Infants.	Total.
A.—Contractors' coolies ...	846	469	273	111	1,639	136	66	32	17	251
B.—Sirdari recruiters' coolies ...	387	314	296	78	1,075	28	21	22	7	79
C.—Sirdari coolies ...	2,924	2,005	1,658	599	7,186	682	424	299	102	1,507
Total ...	4,157	2,788	2,227	788	9,960	847	511	353	126	1,837

The number of infants and children among sirdari coolies was relatively larger than that among the class A coolies, there being 3,061 = 31 per cent. in the former, against 433 = 22 per cent. in the latter. Of the sirdari coolies there were left behind 127 = 1.28 per cent. (all belonging to class C), deserted 140 = 1.42 per cent. (also all from among the class C coolies) compared with 27 = 1.38 per cent. of desertions from the class A coolies.

The death-rate among the sirdari coolies was very high (4.76 per cent.). Besides the deaths, amounting to 368, nearly all of which are attributed to cholera, there were 127 souls left behind, which probably means to die. The losses from all causes were in class A 4.33 per cent., in class B 6.23 per cent., and in class C 8.45 per cent.

Taking all classes of coolies together, so far as the information goes, the following summary of their history may be given :—

Of the 36,209 souls registered, 27,579 arrived at their destination.

Of the 18,377 class A emigrants registered, 12,620 arrived.

Ditto 6,487 ditto B ditto ditto, 4,782 ditto.

Ditto 11,315 ditto C ditto ditto, 10,477 ditto.

The actual losses on account of those who were left behind, those who absconded, and those who died, were heaviest among the class A coolies, as here shown :—

Among class A coolies the losses were 10.37 per cent.

Ditto ditto B ditto ditto, 9.32 ditto.

Ditto ditto C ditto ditto, 7.54 ditto.

But among the A and B classes there were other casualties on account of rejections (class A 5.42 per cent. and in class B 4.43 per cent.) and releases (in class A 4.76 per cent. and in class B 2.06 per cent.), which bring up the entire losses to 20.56 per cent. in class A and 15.81 per cent. in class B. The high rate of casualties in class A was due principally to the very large number of desertions (1,309 = 7.07 per cent.) which are said to have occurred. Death contributed by far the largest proportion of casualties in class B (437 = 6.74 per cent.). This was also the case in respect to the casualties among class C coolies, 547 = 4.82 per cent. being from that cause. Having regard to the

fact that class B included the largest proportion of Dhangur coolies, it is not surprising to find the mortality rate among that particular class higher than that obtaining among the two other classes.

Although the aggregate number of casualties was higher among class B coolies than among class C coolies, many of those in the former case were the result of rejections on account of physical unfitness to labour. The employers of labour under the class B system, therefore, obtain an advantage which is not attendant on the other system.

A statement compiled from monthly returns furnished by the Superintendent of Emigration at Dhubri shows that 8,213 emigrants were registered for transmission by that route to Assam, and that 637 were left behind, deserted, or died on the way, and that, including those born on the road, 7,579 persons arrived in depôt at Dhubri; apparently none of these were rejected on medical examination. While at Dhubri two deserted, 90 died, 56 were detained, and two children were born in the depôt. Seven thousand four hundred and thirty-three persons were despatched from Dhubri and arrived at their destination with only eight deaths. The mortality on the journey to Dhubri is set down at 372, or 4.52 per cent., which is a high rate; but there is some reason to believe that desertions are reported as deaths, and the entire set of returns of the emigration through Dhubri appear at present to be untrustworthy. It is hoped that before the close of the current year the new emigration route from Calcutta by the Northern Bengal State Railway may be in full working order. The railway is now open as far as Rungpore, and complete arrangements have been made for providing shelter and medical treatment for emigrants on the line of road from Rungpore to Dhubri. Orders have also been issued to provide shelter and medical attendance on the road between Rajmehal and Parbuttipore on the Northern Bengal State Railway, as sirdari gangs will in the cold season probably continue to use that route to some extent.

Circumstances were brought to the notice of Government towards the close of the year tending to show that the rule which prohibits the despatch of emigrants from a depôt in which cholera has appeared until the disease has ceased really operated to spread the disease, or, at any rate, to expose a needlessly large number of persons to its action. The rule was accordingly suspended, and measures are now in progress to establish a separate hospital for the treatment of all emigrants attacked by cholera in the various depôts. When these arrangements are completed the propriety of formally cancelling the rule will be considered.

In order to relax as far as possible the restrictions which had been imposed on the free transport of emigrants, the rule under which emigrants were detained four days for medical observation before embarkation was modified in accordance with the opinion of the Sanitary Commissioner with the Government of India. It is believed that the new rule, which came into force on the 1st of January 1878, will afford ample security against the embarkation of emigrants already suffering from cholera in an early stage, while it will diminish the risk which arises from the detention of coolies in a locality like Goalundo, where they are peculiarly liable to contract the disease.

Medical Relief.

THE table given below shows the different hospitals and dispensaries in the town of Calcutta and the Suburbs, and the extent to which the public resorted to these institutions, during the last three years. There was an increase in the number of patients treated at each of the institutions, except the Alipore and Aratoon Apcar Dispensaries, at each of which there was a slight falling off. The total number of persons treated at all the institutions was greater than in any previous year. As compared with the year 1876, there was an increase of 9,793 in the patients of the Calcutta hospitals, and of 15,546 in the patients of the suburban hospitals and dispensaries.

	1875.			1876.			1877.		
	In-door.	Out-door.	Total.	In-door.	Out-door.	Total.	In-door.	Out-door.	Total.
1. Medical College Hospital.	4,456	43,374	49,830	4,352	41,679	49,031	4,067	47,506	52,473
2. General Hospital.	3,234	9,544	12,778	3,999	16,203	20,292	5,144	20,248	25,392
3. Mayo Hospital and Dispensaries.	2,006	191,759	193,765	2,029	187,661	189,690	2,127	187,903	190,030
4. Campbell Hospital.	7,782	.....	7,882	6,640	.....	6,640	6,953	.....	6,953
5. Municipal Police Hospital.	2,880	.....	2,880	2,261	.....	2,261	2,850	.....	2,850
Total Calcutta Hospitals	20,338	246,677	267,035	19,281	248,633	267,914	22,050	255,657	277,707
6. North Suburban Hospital.	625	.....	625	635	.....	635	732	4,059	4,791
7. Sumbhooath Pandit Dispensary.	.....	9,907	9,907	.....	6,475	6,475	.....	7,465	7,465
8. Alipore Dispensary.	119	5,968	6,087	110	4,195	4,605	113	4,188	4,301
9. Aratoon Apcar Dispensary.	.....	9,539	9,539	.....	9,559	9,559	.....	9,508	9,508
10. Howrah General Hospital.	2,245	18,024	20,269	2,310	18,488	20,828	2,463	19,327	21,790
Total Suburban Hospitals.	2,989	43,438	46,427	3,085	39,017	42,102	3,308	44,547	47,855
Grand Total	23,327	290,115	313,462	22,366	287,650	310,016	25,358	300,204	325,562

There were special reasons for the increased attendance at the General and North Suburban Hospitals. The former is the chief resort for sick sailors, and during the greater part of the year the number of sailors in port was far above the average. The number of European seamen treated in the General Hospital as house patients was nearly a thousand in excess of the number in 1876. The large attendance at

the North Suburban Hospital was due to the opening of the out-door department on the 9th March 1877. There was also a great increase in the number of patients at the Medical College Hospital as compared with previous years.

The following statement shows the race and sex of all the persons treated during the past two years:—

RACE.	MALES.		FEMALES.		CHILDREN.		TOTAL.	
	1876.	1877.	1876.	1877.	1876.	1877.	1876.	1877.
Europeans ...	6,415	8,638	1,414	1,665	1,351	1,739	9,180	12,042
Eurasians ...	11,044	10,801	7,741	8,211	15,343	15,419	31,128	34,431
Mahomedans ...	60,112	62,306	14,252	13,799	28,345	31,823	102,709	107,928
Hindoo ...	106,168	110,396	22,750	23,685	23,914	27,489	152,832	161,770
Other castes ...	3,465	2,795	2,919	2,438	4,783	4,158	11,167	9,391
Total	187,204	195,136	49,076	49,798	73,736	80,628	310,016	325,563

It appears from this statement that the general increase in the number of patients noticed above extended to those of every race, except the small body of persons classified under the head 'Other Castes.' Of the total number treated, 59.94 per cent. were males, 15.29 per cent. females, and 24.76 per cent. children. The low proportion of females to males among Hindoo and Mahomedan patients, noticed and explained in last year's Administration Report, was this year particularly marked. Although, as compared with 1876, there was an increase of 2,194 in the number of Mahomedan males treated, there was a decrease of 453 in the number of Mahomedan females; the Hindoo adult male patients increased by 4,428, and the children by 3,575; while the Hindoo female patients increased by only 935. The total proportion of adult female patients to males and children was lower in 1877 than in any of the previous four years.

The following table shows the health of the town and suburbs during the past ten years, as exhibited in the hospital returns:—

YEARS.	ALL DISEASES.			CHOLERA.			Death-rate, excluding cholera.	Number of deaths registered by the Municipality.	Rate per 100
			Died mil						
1868	16,996		199	1,224	563	461	179	13,736	32
1869	18,035	3,043	169	1,144	553	487	147	12,795	29.8
1870	15,816	2,250	142	605	258	426	131	10,462	24.4
1871	17,325	2,288	132	255	112	439	127	10,289	24
1872	10,805	2,761	132	488	217	484	125	11,023	27.8
1873	18,596	2,706	143	492	264	530	132	11,558	26.9
1874	20,331	3,197	167	606	339	509	145	17,611	29.4
1875	22,806	3,815	167	787	405	515	151	15,969	35
1876*	21,832	3,226	147	749	399	539	134	12,964	30.2
1877*	24,322	3,308	133	574	294	512	124	13,704	31.9

* Exclusive of cases treated in the Eye Infirmary.

The death-rate per thousand among those treated was 133, the lowest rate during the past ten years if the exceptionally healthy period 1871-72 is excluded. Omitting cholera cases, the mortality among the patients was 124 per thousand, a lower rate than in any of the preceding nine years. The number of, and mortality among, patients cannot, however, in ordinary years be regarded as tests of the amount of sickness and the virulence of disease. The popularity of the medical institutions of Calcutta and the suburbs is undoubtedly increasing, and is shown by persons resorting to them at the earlier stages of disease and for less serious ailments. As a necessary consequence, while the number of patients rises the death-rate falls.

The return of the principal diseases from which in-door patients suffered showed a large increase in malarious fevers. There were 6,706 admissions and 483 deaths due to fever of various types, as compared with 4,730 admissions and 351 deaths in 1876. In all 916 important surgical operations were performed during the year, against 669 in 1876. The total mortality in 1877 was only 77, or 8·4 per cent. of those operated on, against 74 deaths, or 11·06 per cent., in the previous year. The operations on the eye were even more successful in 1877 than in 1876. In each year only one operation ended fatally; but the number of operations was 318 in 1877, against 223 in the previous year.

The whole subject of the expenditure and management of the Calcutta hospitals has been exhaustively examined by a committee appointed in February last, and their report will enable Government to carry out many reforms, and to check the waste which has characterized the expenditure of several of the hospitals in late years. The total expenditure of the different medical institutions during the year 1877 was Rs. 5,09,804, against Rs. 5,07,473 in 1876. In the expenditure of the General Hospital there was an increase of Rs. 37,709 above that of the previous year, and Rs. 33,366 of this increase is classed under the head 'Miscellaneous Charges.' The Municipal Police Hospital showed an increase in expenditure approximately proportional to the increase in the number of patients treated, while there was a decrease of expenditure in the Medical College, Campbell, North Suburban, and Howrah Hospitals, notwithstanding that the number of patients treated at each of them was greater in 1877 than in 1876. In the Medical College Hospital the expenditure on diet and wines was less than that of the previous year by Rs. 1,506, though 615 more in-door patients were treated during the year. The increased expenditure of the Mayo Hospital was almost entirely under the head 'Repairs and Construction of Buildings,' and the large amount entered in 1876 under the same head against the Sumbhoonath Pundit's Dispensary accounts for the decrease in the expenditure on that institution in the past year. Considering the increase in the number of patients treated at the several institutions, the expenditure of the past year compared on the whole favourably with that of 1876. The question of the preparation of uniform returns and forms of account for all hospitals, so that a comparison can be made of the expenditure of the different hospitals under each head, is under the consideration of the Committee on Medical Expenditure.

The subscriptions to the various medical institutions amounted during the year to Rs. 35,075, against Rs. 41,201 in 1876. Subscriptions to the amount of Rs. 26,093 were received for the Howrah Hospital alone in 1877. The only institution that invested any surplus income during the year was the Aratoon Apear Dispensary.

The lady nurses of the Canning Home and the nurses employed under the Calcutta Hospital Nurses' Institution performed most useful service. The two institutions were placed under one committee during the year, and their amalgamation will, it is believed, be to the advantage of all classes of the community. The patients in hospital will receive the benefit of more skilful nursing, whilst the establishment of a body of trained out-nurses will supply a want which has long been felt in Calcutta.

Exclusive of 536 house-patients in the Ophthalmic Hospital there were 4,431 in-door patients treated during the year. Of these 2,189 were Christians and 2,242 were natives. The death-rate was 10·83 per cent. as compared with 12·9, the average of the seven previous years. Excluding moribund cases, the death-rate was only 9·1 per cent. of the total number treated. Of both Christians and natives there were fewer admissions from cholera than in any of the previous ten years. There were 184 important surgical operations performed during the year, and in 32 cases the patients died. The deaths from septicæmia were eight, or 25 per cent. of the total deaths from operations. It was, however, by no means clear that even most of these deaths were due to hospitalism, and it appears to be conclusively shown that in many cases in which deaths have hitherto been attributed to hospitalism, mortification had set in and blood-poisoning declared itself some days before the patients were admitted to the hospital. The healthy quality of the hospital air was shown by the fact that though there were isolated cases of erysipelas under treatment during the year, the disease did not spread or infect other patients. The question of the defective construction of the surgical wards has been fully and exhaustively treated by the Committee on Medical Expenditure, and it is believed that after the improvements recommended by the committee have been carried out the hospital, though not perfect, will be to all intents and purposes a practically good and efficient hospital, as well adapted for the treatment of surgical cases as the great majority of European hospitals. The whole cost of the improvements suggested by the committee will, it is believed, be within the sum of six lakhs of rupees, the limit originally fixed by Government in 1868. Arrangements are being made by the Public Works Department for acquiring, under the provisions of Act X of 1870, the land required for the new buildings, and for preparing the plans and estimates of the works which will be commenced at once. The Government of India have agreed to make the three lakhs of rupees already sanctioned as an imperial grant for improvements in the hospital available from the 1st April 1879. In the event of all the works costing less than the six lakhs of rupees which were assigned by the Government of India, with the concurrence of the Secretary of State, as the maximum limit of the grant for the purpose, the local Government propose, to ask the

Government of India only for a moiety of the cost. The number of out-door patients who attended the dispensaries was higher than in any of the preceding five years, there being 47,506 cases treated, against 44,679 in 1876. The erection of a new out-door dispensary, which is much wanted, has been ordered from the funds bequeathed for the purpose by the late Baboo Choonee Lall Seal. The dispensary is to be erected on a plot of land adjoining the Medical College grounds, and will be called 'Choonee Lall Seal's Charitable Dispensary.'

The in-door patients treated during the year were 5,144, including 531 natives; the numbers in 1876 being 3,569 Christians and 430 natives. The death-rate of the Christians was 4.05, and that of the natives 7.72 per cent. The great increase in the number of patients has been already explained as mainly due to the large number of sailors in port. During August, September, and October a severe type of malarious fever prevailed resembling dengue in many of its symptoms, and frequently accompanied by an eruption. The attack lasted for a few days, and was often followed by one or more relapses. There were altogether 410 more cases of malarious fever in 1877 than in 1876, and an excellent opportunity was thus afforded for testing the value of the mixed cinchona alkaloids manufactured at the Government plantation at Rungbee. Dr. Raye considers that the experience of the year justifies the conclusion that the cinchona febrifuge may be confidently administered instead of quinine in the great majority of ordinary malarious affections. In the low forms of intermittent fever Dr. Pilcher, of the Howrah Hospital, maintains that the cinchona alkaloids given with ether have yielded better results than were formerly obtained with quinine. Nearly one-fourth of the deaths in the European wards of the General Hospital resulted from cholera, 43 out of 73 cases ending fatally. Of the 73 cases 65 were received direct from the shipping. Of 18 cases of typhoid fever 16 were from the shipping. The number of cases of sun-stroke was nearly double the average of the past ten years, and of the 20 cases admitted there were six deaths. Many of the cases were of a very severe type, the sufferers being almost moribund on admission. During the year an operating theatre and lying-in-room were added to the hospital building, and both are now in use. Sanction was given to the erection of new quarters for the nurses, and the work was begun before the close of the year. The department of the Sumbhoonath Pundit's Ward for out-door patients was abolished on the 31st December; and as the cost of the ward was found to be out of all proportion to its usefulness, orders were subsequently given that it should be altogether closed.

During the year under review the continually increasing expenditure of this pauper hospital attracted the attention of Government, and a special committee was appointed to institute a searching inquiry into its administration. The result of the committee's inquiry was to show that under lax supervision the expenditure had increased in a way that left little doubt that peculation and dishonesty were rife amongst the subordinate establishment, and a complete change in the administrative staff was made. The number of admissions was 6,600, against 6,279 in the previous year;

but the daily average number of patients was 22 less than in 1876. The death-rate was 24·8 per cent., against 26 per cent. in 1876 and 28 per cent. in 1875. Excluding the moribund cases, the mortality was somewhat greater than in 1876, being 23·2, against 22·4 per cent. The very high rate of mortality in this hospital is due to the fact that it has been the practice to transfer to this institution many patients in a low or dying condition. It appears that, in the years 1876 and 1877 63 and 52 per cent. respectively of those who died in the hospital succumbed within a week of their admission.

In all 190,030 persons received treatment in these hospitals during the year, as compared with 189,690 in 1876; and the death-rate among the in-door patients was 12·04 per cent., against 12·72 per cent. in 1876. The mortality at the Mayo Hospital was 13·12 per cent., or about two and a half times that of the Chandney Hospital.

There was a further increase this year, as compared with 1876, in the number of both in-door and out-door patients. The number of European and Eurasian in-door patients rose from 868 to 953, but there was a fall of more than a thousand in the number of Christian out-door patients. The number of native in-door and out-door patients rose from 1,472 and 12,422 respectively in 1876 to 1,510 and 14,329 respectively in 1877. The mortality both among Christian and native in-door patients was considerably higher than in 1876, being 3·99 per cent. among the former and 25·23 among the latter. Of the 419 deaths during the year 276 occurred within ten days of the admission of the patients. This hospital receives a large proportion of the neglected sick and the ill-fed poor of the town, and very many of those brought to the hospital are in the very last stage of disease. Since the close of the year sanction has been given to the expenditure of Rs. 10,000 from the 'Port Dues Hospital Fund' for the construction of a new native ward and store-room, so as to increase the accommodation available for seamen by 15 beds.

The number of admissions to the Police Hospital exceeded the admissions of the previous year by nearly one-fifth of the total strength of the municipal, suburban, and river police, and there were 11 more deaths than in 1876. The increase was, however, not due to any epidemic, and the death-rate to admissions was 2·3 per cent., against 2·46 in the previous year. The deaths, compared with the total police force, were 1·99 per cent., against 1·66 per cent. in 1876. The number of in-door patients in the North Suburban Hospital rose from 635 in 1876 to 732, while the number of deaths fell from 147 to 118. The out-door department was, as already stated, opened in March 1877, and from that date to the end of the year 4,059 cases were treated, giving an average daily attendance of 41. The average daily attendance at the Bhowanipore Dispensary was 67·4, against 52·8 in 1876 and 93·02 in 1875. The number of out-door patients who availed themselves of the Aratoon Apear Dispensary was 9,508, a rather smaller number than in either of the previous two years, and the average daily attendance was also less than in either of those years, being 96 in 1877, against 103 and 110 in 1876 and 1875 respectively.

Two hundred and thirty charitable hospitals and dispensaries were open on the 31st December 1876. During the year under report 12 new dispensaries were sanctioned or established, against 23 in 1876; but this latter number does not include the dispensary at Belooogram, which was sanctioned in February and closed in August. Of the numbers established, two were of class III, grade 2; eight of class III, grade 3; and two were opened under Rule VII of the Dispensary Manual.

Three dispensaries were abolished during the year; all were of class III, grade 3. Two hundred and thirty-nine remained open on the 31st December 1877. Of these, 79 remained under the old rules of 1864, that is, 33 main, 34 branch, and 12 sub-divisional dispensaries. In the Beerbhoom district nine temporary endemic fever dispensaries were open on the 1st January 1877, but all were closed during the year. Two dispensaries were established and kept open for a limited period at Mouressur and Bhulpore for the reception of cholera patients. In the Midnapore district 11 temporary dispensaries for endemic diseases were opened, of which six were closed in the course of the year.

The number of hospitals which received in-door patients formed 62·2 per cent. of the 225 institutions from which returns were received, against 65·17 in 1876. The number receiving in-door patients was 37·8 per cent., against 34·83 in 1876.

The table in the margin shows the recorded attendance during the

Patients treated in dispensaries.

YEARS.	In-patients treated.	Out-patients treated.	Total.	Mortality among in-patients per cent.
1872	18,118	439,177	457,295	16·07
1873	20,240	598,470	618,710	16·22
1874	23,842	636,289	660,131	16·84
1875	22,009	608,730	630,739	16·89
1876	23,012	809,275	832,287	16·81
1877	23,109	810,145	833,254	17·37

past year and in the preceding five years. There has been a steady increase in the total numbers treated from the year 1872. The total number treated in 1877 exceeded that of 1876 by 967 cases. This number would have been higher had not the figures of nine dispensaries in the

Jessore and three in the Durbhunga districts been excluded from the general numerical results owing to the non-receipt of returns. The number of in-patients treated exceeded that of 1876 by 97, while the out-patients exceeded the recorded number of last year by 870.

The proportion of male and female adults and children to the total number of patients treated was nearly constant during the past three years. Of the total number of patients treated in the dispensaries during 1877, 60·9 per cent. were males, 20·4 per cent. females, and 18·7 per cent. children under 12 years of age, against 61·33 per cent. males, 20·83 per cent. females, and 17·83 per cent. children under 12 during 1876, and 64·16 per cent. males, 18·69 per cent. females, and 17·14 per cent. children under ten years of age during 1875.

The percentages of recoveries, and deaths among in-door patients in dispensaries* amounted to 67·25 and 17·37 respectively, against 68·36 and 16·81 in 1876. The death-rates of individual dispensaries varied considerably in different

Results of treatment.

districts. The Presidency Circle showed the highest death-rate (20·95), while the rates in the Dacca and Dinapore Circles were 14·08 and 14·06. The charitable hospitals and dispensaries in large towns and along the customary route of pilgrims also showed high death-rates.

Malarious fevers, dysentery, diarrhoea, ulcers, syphilis, spleen diseases, cholera, rheumatism, and dropsy, were the principal causes of admission of in-door patients. Among the out-door sick fevers, goitre, rheumatism, ulcers, skin diseases, spleen affections, injuries, &c., formed a large proportion of the cases treated.

The following diseases caused the bulk of the deaths which took place in hospital:—Dysentery, cholera, diarrhoea, fevers, dropsy, injuries, debility, and spleen diseases. The mortality from dysentery per cent. of total deaths was 26·7, cholera 13·8, diarrhoea 11·6, fevers 8·2, dropsy 6·1, injuries 5·2, debility 3·6, and spleen diseases 2·9. The proportion of deaths from each of these diseases during 1876 was 22·2, 20·6, 10·7, 7·6, 6·07, 4·9, 3·02, 2·8 respectively. The mortality from fevers was higher than in 1876, while that from cholera was considerably less. Deaths from dysentery, diarrhoea, dropsy, injuries, debility, and spleen affections formed a larger proportion of the total mortality than they did in 1876. Leprosy was not as fatal in 1877 as in 1876, while the mortality from syphilis remained almost the same.

During 1877 there were 2,301 major and 37,908 minor surgical operations performed in the charitable dispensaries in the province, against 2,400 major and 37,929, minor operations during the previous year. There was thus a decrease of 99 major and 21 minor operations. The more important operations were generally performed under the superintendence of the Civil Surgeons and Assistant Surgeons. The hospitals and dispensaries in which the largest number of major operations were performed were Monghyr (224), Dacca (184), Dinapore (94), Mozufferpore (70), Moorshedabad (64), and Patna (61). Last year Monghyr also headed the list, showing 230 major operations.

Of the patients on whom the 2,301 major surgical operations were performed 76 per cent. were cured, 7·4 relieved, and 4 per cent. died, against 3 per cent. in 1876. Two hundred and nineteen operations were performed on the eye and its appendages; there were 154 operations for removal of calculi from the bladder, and 80·5 per cent. of the cases resulted in the patients being completely cured. The total number of cases of labour, premature, natural, or difficult, recorded for the year was 145, against 188 cases in 1876. The dispensaries in which the greatest number of these cases were treated were Arrah, Moorshedabad, Dacca, and Chittagong.

Excluding the balance in hand on 1st January, and cost of medicines and forms, the total income of 1877 was Rs. 4,00,160-2-9 and the expenditure 4,00,295-2-3, thus leaving a debit balance of Rs. 134-15-6, which, deducted from the floating balance which was available on the 1st of January 1877, gives a total sum of Rs. 98,139-7-9 in favour of these charitable institutions. The average income of each dispensary was Rs. 1,786,

against Rs. 1,967 in 1876, and Rs. 2,216 during 1875. The average expenditure was Rs. 1,787, against Rs. 1,886 and Rs. 2,111 in 1876 and 1875 respectively.

The total income of all charitable dispensaries in the province for 1877, exclusive of the floating balance and the cost of medicines and forms which were supplied by Government, is shown in comparison with the returns of the five preceding years in the following statement:—

YEARS.	Total income.	PERCENTAGE OF INCOME TO THE TOTAL INCOME RECEIVED FROM				
		Government.	Local funds.	Interest on invested capital.	European subscription.	Native subscription.
	Rs.					
1872 ...	2,31,601	58·61	17·4a	7·09	7·47	20·43
1873 ...	3,10,886	34·31	19·69b	6·23	7·93	31·84
1874 ...	3,36,197	35·83	19·93c	4·92	7·09	32·22
1875 ...	3,74,902	32·60	27·82d	4·62	6·74	28·19
1876 ...	3,77,017	32·50	22·91e	5·86	6·66	32·06
1877 ...	4,00,160	30·73	25·47f	6·00	5·54	32·25

a 3·97 from municipalities and town committees, and 13·43 from all other local sources.

b 5·17 ditto ditto ditto, and 14·52 ditto ditto.

c 6·77 ditto ditto ditto, and 13·16 ditto ditto.

d 7·22 ditto ditto ditto, and 20·58 ditto ditto.

e 8·97 ditto ditto ditto, and 13·93 ditto ditto.

f 7·27 ditto ditto ditto, and 18·02 ditto ditto.

There was an increase in the total income for 1877 of Rs. 23,143. The proportion contributed by Government showed a marked decrease, and was less than in any of the five preceding years, while the increase in the income from local funds was considerably in excess of that of four out of the five years 1872-76. The percentage of subscriptions received from Europeans was less than in any of the five preceding years. The decrease in the total amount of their subscriptions and donations was Rs. 2,954. The proportion of subscriptions and donations received from natives was almost the same as in 1876, but the total amount subscribed exceeded that contributed in 1876 by Rs. 8,173.

Cost of medical stores and printed books and forms.

The cost of medicines, books, &c., supplied by Government to the charitable dispensaries in 1877 amounted to Rs. 20,579, against Rs. 63,615 in 1876.

The total value of Government medicines sold in the mofussil during the last financial year amounted to Rs. 11,989-3-1, as detailed in the table below:—

	Half year ending 30th September 1877.			Half year ending 31st March 1878.		
	Rs.	A.	P.	Rs.	A.	P.
Quinine ...	6,355	13	0	4,097	0	5
Darjeeling quinine...	489	7	3	892	3	11
Chiretta ...	0	14	6	0	15	0
Jalap ...	6	14	0	0	9	0
Castor-oil ...	72	14	3	64	7	6
Cholera pills • ...	6	14	6	1	1	9
Total ...	6,932	13	6	5,056	5	7

The value of the sales of the previous year was exceeded by Rs. 5,449-12-10. There has been a steady increase in the sale of Darjeeling quinine. During the half year ending 31st March 1877, when it was first offered to the public for sale, the amount realized was only Rs. 57-9-10. During the current year the sale of quinine to the public has, on the recommendation of the Medical Commission, been put a stop to.

The returns for 1876 showed for the first time for several years a decrease in the number of patients detained in the native lunatic asylums in Bengal. In 1877 there was a further decrease; the number in confinement on the last day of the year being 1,077, against 1,131 on 31st December 1876. The number of admissions, including re-admissions, during 1877 was 285, against 366 during the previous year. These results were evidently due to the orders of Government prohibiting the indiscriminate admission of lunatics into public asylums.

The total number of lunatics discharged was 266, against 263 in 1876. Under the orders of Government special inquiries were made to ascertain what number of lunatics who had been unnecessarily admitted might be made over to the custody of their friends. These inquiries had not been concluded at the close of the year, but they had the result of raising the number shown as discharged "improved" from 80 to 96. It is anticipated that it will be possible still further to relieve the asylums by the discharge of lunatics of this class, who have either partially recovered their reason or passed the acute stage of insanity, where there is most probability of cure.

The Moydapore Asylum was closed during the year. The remaining asylums, which are capable of holding 1,400 patients, afforded ample accommodation for the number of lunatics confined, and there was never anything but the most trifling overcrowding in any of the asylums.

The number of criminal lunatics detained in asylums was 269 at the beginning and 278 at the close of the year. Only 68 new cases were admitted, against 85 in 1876; the re-admissions were seven, against six in the previous year. The number of discharges and of deaths was 51 and 15, against 31 and 23 respectively in 1876.

Of 1,416 persons who were under treatment during 1877, 274 were suffering from acute mania, 548 from chronic mania, 116 from melancholia, 93 from acute dementia, 331 from chronic dementia, 11 from idiocy, 5 from imbecility, and 2 from amentia, while 36 are described as "not insane." There were 60 cases of recovery from acute and 38 from chronic mania, 7 from melancholia, and 9 from acute and 12 from chronic dementia. There were 97 patients suffering from melancholia at the close of the year. Of 166 cases admitted in which the predisposing cause of insanity was ascertained, 156 were found to have originated in physical and 10 in moral circumstances. Of the former, 107 were attributed to the excessive use of ganja or bhang, 13 to undue indulgence in drink, and 2 to opium eating. Of the latter, seven were caused by grief. Of the 410 persons treated in the asylums whose insanity was attributed to the excessive use of ganja or bhang, 56 completely and 47 partially recovered. The total number of complete cures was 147, against 130 in 1876. Calculated on the average mean population of the asylums, the ratio of cures was 13 per cent., against 10·6, the ratio of the previous year. Calculated on the number of admissions it was 51·57, against 53·5.

The asylums generally were much more healthy than during the previous year. The average daily number sick was only 68·99, or 6·17 per cent., of mean strength, against 98·31, or 8·02 per cent., in 1876, and 84·45, or 7·75 per cent., in 1875. The numbers in hospital were greatest in Hazareebagh, Dacca, and Patna. In Dacca there was a good deal of fever and of diarrhoea and dysentery. The last-named complaints were, however, much less common than in previous years, and only 37·9 per cent. of the inmates were thus attacked, against 51·9 in 1876 and 49 in 1875. In Patna fever and bowel complaints led to 50 out of the 81 admissions to hospital. There were only three fresh cases of consumption, against 13 in the previous year. There was no cholera in the Dullunda Asylum, and a very remarkable decrease in cases of diarrhoea and dysentery, due apparently to a better supply of pure water. Only two cases of diarrhoea were admitted to hospital, and there were 3 admissions from dysentery with one death, against 32 admissions with 12 deaths in 1876. There were 62 cases of wounds, contusions, and fractures in all the asylums. The majority of these were the result of quarrels between lunatics at work. There were 73 deaths, or 6·5 per cent., of average strength, against 119, or 9·7 per cent., in 1876. There were eight deaths from cholera, 11 from dysentery, 7 from diarrhoea, and 12 from phthisis. Of these last, seven were contributed by Dullunda, four by Patna, and one by Cuttack.

The following statement shows the receipts and expenditure of each native asylum:—

ASYLUMS.	1	2	3	4	5	6	* AVERAGE COST OF EACH PATIENT IN RELATION TO				
							Establishment.	Diet.	Bazar medicines.	Contingencies.	Clothing.
	Daily average strength.	Total expenditure.	Realized from the friends of patients.	Actual profit from manufacture department.	Average cost of each patient, as per column 5.	Average cost of each patient, deducting columns 3 and 4.					
Dulunda ...	21304	Rs. A. P. 29,789 6 2	Rs. A. P. 954 8 11	Rs. A. P. 4,012 3 6	Rs. A. P. 135 2 2	Rs. A. P. 111 10 10	Rs. A. P. 59 13 10	Rs. A. P. 57 13 9	Rs. A. P. 0 1 8	Rs. A. P. 14 5 11	Rs. A. P. 2 15 0
Dacca ...	20496	21,801 7 2	27 12 3	3,568 9 2	104 5 10	86 13 1	43 2 11	56 10 9	0 1 11	2 15 7	1 6 8
Patna ...	21617	21,717 0 1	230 10 0	2,150 9 2	100 7 4	89 4 11	40 4 5	45 14 8	0 4 4	6 1 1	7 14 10
Cuttack ...	4983	5,736 0 1	169 14 3	224 9 8	115 1 9	107 3 1	71 4 3	37 6 9	0 2 8	3 8 5	2 11 8
Moydapore ...	4470	3,844 7 6	.....	1 4 0	85 0 1	63 15 7	44 9 6	37 11 8	0 0 2	1 12 4	1 14 5
Berhampore ...	16627	14,138 3 1	85 0 0	1,553 3 5	85 0 6	74 12 11	43 5 4	36 11 6	0 0 5	2 4 6	2 10 8
Haarcebach...	222 06	17,812 2 5	206 13 10	666 14 2	80 5 6	76 6 7	37 9 1	35 0 8	0 6 2	3 4 11	4 0 8
Total ...	1,117 03	1,13,458 10 6	1,704 11 3	12,237 5 1	101 9 1	89 1 5	46 0 3	45 14 11	0 2 11	5 10 11	3 12 1

* Receipts and expenditure.

The gross expenditure during the year was Rs. 1,13,458, with a daily average of 1,117 lunatics, against Rs. 1,18,792, with a daily average of 1,224 in 1876. The gross average cost per head was Rs. 101, against Rs. 97. The amount realized from the relations or friends of lunatics was Rs. 1,704, against Rs. 2,599. The statistics of cost in Dullunda are disturbed by the large sum debitable to this asylum on account of the salaries of the Superintendent and Deputy Superintendent. These exceed the charges for superior establishment in other asylums of similar capacity by Rs. 6,108 annually. The expenditure in Cuttack is unduly increased by the salary of the Superintendent. No uniform scale of subordinate and menial establishment has yet been adopted for the different asylums. In Dullunda the proportion of male keepers to males was 1 to 5·7; in Patna, where the daily average number of male lunatics was the same (159), it was only 1 to 9·3; and in Hazareebagh 1 to 8·8. The proportion of female keepers was 1 to 6 female patients in Dullunda, 1 to 9 in Patna, and 1 to 14 in Berhampore. In English county asylums the proportion of attendants to patients is about 1 to 11. There were 14 sweepers to 213 patients in Dullunda and 10 to 204 in Dacca, against 4 to 156 in Berhampore, 6 to 222 in Hazareebagh, and 7 to 216 in Patna. Seven water-carriers were employed in Dullunda and four in Berhampore; while Dacca had none, Patna only one, and Hazareebagh two. There was, further, a great divergence in the average charge per patient for diet and contingencies, and the attention of the Surgeon-General was invited to the subject. The daily average number employed on the various classes of work during the year was 911, or 81 per cent. of the total asylum population, against 886, or 72 per cent., in 1876. The net profits during the past year in each asylum are shown in the statement given above.

There were 34 new admissions and three re-admissions to the Bhowanipore Asylum. European asylum at Bhowanipore during the year. Of 62 persons under treatment, 15 were wholly and 11 partially cured; 4 were despatched to Europe under the Merchant Shipping Act; 3 were made over to the Military authorities; and 2 were sent to Bombay for removal to Europe as still insane. There were no deaths during the year. In 18 cases among those admitted insanity was hereditary, and in 7 the predisposing cause was intemperance. The number of paying patients treated during the year was 29, from whom the asylum recovered Rs. 15,592. The net cost of the asylum in 1877 was Rs. 16,607, and the average cost per patient amounted to Rs. 572 per annum, against Rs. 823 in the preceding year.

At the close of the year 1876 the number of women on the register was 8,241. In January 1877 the names of the women who could not be traced for six months, as well as of those who had died, or were exempted from attending examination, were struck off, and there remained on the register 7,507 women, including those brought on it during the month. In previous years the lists were revised half-yearly, in January and July. Since August 1877 a system of monthly revision has been introduced, and it is now possible to

• • •
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institute a comparison between the opening and closing figures for the year. The number of women on the register in December 1877 was 7,505.

Seven hundred and ninety-two women were arrested for carrying on prostitution without being registered. Of these, eleven, against whom the evidence was insufficient, were released, and eight were placed before the Magistrate and punished with fine or imprisonment. The remaining 773, on being brought before the Deputy Commissioner of Police, elected to be registered, and were placed on the books and discharged. Forty-three others presented themselves voluntarily for registration. The total number of women newly registered during the year was thus 816, against 913 in 1876. The percentage found diseased was 27·6, against 29·1 in 1876 and 34·1 in 1875.

The number of women reported by the medical officer for default from periodical examination was 6,123, against 6,604 in the previous year. Only 1,039 of them were arrested, against 3,708 in 1876 and 4,588 in 1875. Of those arrested 461 were fined, 102 imprisoned, 467 warned, and 9 discharged by the Magistrate. The falling off in the number of arrests during the year under report was owing to a departure from the former practice of arresting every woman who failed to attend examination, and to the adoption of a different procedure, under which defaulters were not prosecuted or regarded as having been arrested if they could in any reasonable manner account for their absence. The old rule was, however, reverted to at the close of the year, as it was feared that its relaxation was apt to lead women to look upon absence from examination as a very trivial matter. Out of 4,052 defaulters examined 397, or 9·7 per cent., were found diseased, against 322 out of 4,491, or 7·1 per cent., in 1876. The proportion of disease among women who were regular in attendance was 1·5 per cent.

The number of admissions to hospital was less than in 1876 by 155, and there was a considerable decrease in cases of the more severe forms of disease. It may generally be stated that the health of the registered women was unusually good. There was also a falling off in the gross number of venereal affections treated in the civil hospitals. There were only 8,050 cases of venereal diseases out of 243,013 cases treated in the Medical College, Chandney and Mayo hospitals, and the Sookea's Street, Alipore, Park Street, Chitpore, and Bhowanipore Dispensaries, against 8,761 out of 236,440 in 1876 and 9,221 out of 247,712 in 1875. The number of cases of primary syphilis, however, was 2,948, against 2,773 in 1876; and this, looking to the very small amount of syphilis found among registered women, was no doubt owing to the prevalence of unregistered prostitution. The greater part of the increase was observable in the returns of the Mayo Hospital. Attention was more than once drawn to the unsatisfactory working of the law in the Jorabagan and Jorasanko sections, which adjoin this institution. Out of 1,618 defaulters reported in these two sections, only 453 were arrested. The comparative statements of disease and default supplied by the Superintendent of Lock-hospitals showed that these sections, with Colootolah, Bow Bazar, and Farnwick Bazar, were very insufficiently protected. The proportion of disease and the irregularity in attendance among the women of the Watgunge section were also unsatisfactory.

The general health of the women in hospital was fair, and there were no cases of cholera. According to the figures supplied by the Superintendent the gross cost of supporting the institution was Rs. 35,851-6-3, against Rs. 36,616-12-7 in 1876. There was a slight reduction in the cost of establishment, some decrease in the gross charge for diet and extras, and some increase in the amount spent in clothing and contingencies. The mean daily number of sick was 288·6, against 295·6 in 1876, and the average cost per patient was Rs. 124-3-7, against Rs. 123-13-11. The gross cost of the preventive establishment was Rs. 16,957-6-3, against Rs. 17,518-0-7 in the previous year.

In one respect the health of the garrison of Fort William was unsatisfactory, the ratio of cases of primary syphilis to the mean strength of the garrison being higher than in any year since 1872. This state of things was found to be the result of clandestine prostitution among women in the Fort, an evil which can only be fully dealt with by the Military authorities. Only 56 men contracted gonorrhœa, against 82 in 1875 and the same number in 1876. Altogether the condition of the garrison compares most favourably with that of other bodies of British troops, the ratio per cent. of venereal disease of all kinds among the former being only 10·7 per cent. during the past year. In the garrison towns of the United Kingdom to which the English statute has been extended the statistics show a range from 33 per cent. in Shorncliffe to 62 per cent. in Cork.

Looking to the great increase in the shipping of the port during the year 1877, and to the constant exposure of the prostitute class to imported infection, the working of the Act in Calcutta must be considered to have been attended with immense public benefit. With the exercise of greater vigilance in some sections of the town the measure of success might be considerably increased.

The improvement in the working of this Lock-hospital, which was noticed in the last Administration Report, continued during the year 1877. With an average strength of 808 soldiers, the admissions into the hospital numbered 164; so that the ratio of admissions per 1,000 of the strength of troops in the cantonment was 203, against 226·75 in 1876 and 217 in 1875. Excluding cases in which disease was clearly contracted elsewhere, the ratio of men diseased in the cantonment in 1877 was 193 per mille.

The number of women sent to the hospital was 357, or 21 in excess of the number in 1876, and the ratio of admissions to 1,000 of strength was 491·2. The number on the register on the 31st December 1877 was 92, against 88 at the close of the previous year. The names of 28 women were struck off, and the names of 32 added to the register during the year. Of the former a few left the station, and some are stated to have married and abandoned their trade. The average number on the register during the past five years was 92. The number reported during the year for absence from the examinations was 20, exactly half the number of absentees of the previous year. This regularity of attendance, notwithstanding that the examinations were weekly, was attributed to the greater certainty of punishment for non-attendance than existed before; and, with the other facts mentioned above, viz. the increased number of women on the register as well as in hospital, and

the diminished number of soldiers admitted into the hospital, is an evidence of the efficiency with which the rules were enforced during the year.

But though the weekly system of examination of registered women, which was one of the special measures adopted to ensure better results of the working of the Lock-hospital rules, led to no irregularity of attendance at the periodical examinations; it has since the close of the year been considered desirable to discontinue it, and to revert to the former plan of fortnightly examinations, as more frequent inspections, without leading to any diminution of disease, were found to be productive of hardship, annoyance, and expense to the women, who had to travel long distances to attend them.

Without the exercise of any undue pressure on the women, they were induced when in hospital to supply their own diets, and during the last quarter of the year rather more than a fourth of the total diets was supplied by the women.

There was an increase of disease among the European soldiers.

At Barrackpore. The ratio of admissions into hospital per 1,000 of strength was 283·5, against 164 in the previous year. Exclusive, however, of the cases stated to have been contracted at other stations, the ratio was 184, against 101 of the preceding year. The large increase of disease among the soldiers was attributed by the medical officer to their crossing the river to Serampore, where there are unregistered women, and to the women from Serampore coming over to Barrackpore to ply their calling. The establishment of a separate Lock-hospital at Serampore has been sanctioned by the Government of India since the close of the year. Out of an average population of 76·83 on the register, against 56·81 in the previous year, no less than 166 were sent into hospital, against 57 in 1876. These figures show that the examinations were by no means inefficient; and in this respect they compare favourably with the results of the past year. But the number reported for non-attendance at the examinations increased from 51 in 1876 to 77 during the past year. Of these, 25 were apprehended, 50 left the jurisdiction, and warrants were issued for the arrest of the remaining two. Altogether 178 women were apprehended for unlicensed prostitution and for other breaches of the Lock-hospital rules, against 77 in 1876; and of these 75 were punished by fines and imprisonment, against 6 in the preceding year. The large number of acquittals (103) shows either that a number of needless arrests were made, or that the offenders were leniently dealt with. On the whole the rules were more carefully enforced than during the previous year, though the result on the health of the soldiers was not satisfactory.

The total number of admissions into hospital among the soldiers

for venereal diseases of all kinds was 125, against 147 in 1876. The average strength of troops was

693; so that the ratio of admissions to every thousand men was 180·37, against 218·49 of the previous year. Out of the 125 cases admitted, only 61 were cases of disease contracted at Dum-Dum; 11 were cases of re-admission; the rest were brought from other stations. The number of cases of syphilis among the men rose from 50 in 1876 to 63 in 1877. Among the women gonorrhoea was more common than syphilis, and

from this fact the medical officer suspected that the men had contracted disease from other sources than the registered women of the station. The total number of women found diseased at the examinations was 75, against 56 for the preceding year; the average number on the register being 34·83, against an average for the preceding year of 34·42. The number of women who were reported for non-attendance at the fortnightly examinations was 44, against 10 in 1876. Of the 44 absentees, 18 only were arrested and punished. In all 34 women were arrested for unlicensed prostitution and other breaches of the Lock-hospital rules, and of these 27 were punished, against 5 in 1876. The rules were apparently more strictly enforced, but the results were unsatisfactory, as evidenced by the increased number of absentees and the small number left on the register at the close of the year. During the year 26 names were removed from the register and 21 were added. The closing number was 32, against 37 in 1876. This unsatisfactory result was attributed to the great extension of the area under the rules by the inclusion of the tract of country comprised in the jurisdiction of the police-station of Areada. Since the close of the year the Government of India have sanctioned the withdrawal of this tract from the operation of the rules.

The institution continued to work most successfully, and, as in 1876, there was not a single case of syphilis at Hazareebagh in the past year. But with the same strength of soldiers, viz. an average of 100 men, the number of gonorrhoea cases was nearly four times greater than in 1876.

The average number of women on the register diminished from 29·97 to 22·3. It is said that in consequence of the reduction of the garrison many of the women left Hazareebagh for other stations. The average attendance was 222. Of the four women who were reported for non-attendance, one was punished by fine, and the names of three others who absconded were removed from the register. The number of women found to be diseased at the periodical examinations was 28, or a percentage of 125, against 107 in 1876.

There were 24 cases of admissions into the hospital, against 15 in 1876, among an average strength of soldiers of 244·93. This gives a ratio of 97·98 per average strength of 1,000, against 71·42 in the previous year. The average number of prostitutes on the register during the year was 8·41, against 10 of the preceding year. The average attendance at the fortnightly examinations was 7·1. Fifteen women were reported for non-attendance at the periodical examinations, against 8 in the preceding year. Eight of the defaulting women were arrested and punished, but the fines aggregated only one rupee. In the remaining cases the women were warned and discharged. Four unregistered women were prosecuted for practising prostitution. Two were fined, another was registered, and the fourth acquitted. The number of women sent to hospital was 10, of whom one, who suffered from extreme debility, died. The transfer of the Lock-hospital at Darjeeling to the control of the Military authorities at the station, and its removal to the new building erected at Jallapahar, to which allusion was made in the last Administration Report, took place on the 1st April 1878.

Sanitation.

THE excessive mortality from fever during the year in Bengal is attributed in several cases to the defective and impeded natural drainage of the country. Thus Dhuneakhally, a village in the Hooghly district, is said to suffer much owing to the silting up of the rivers which traverse it. In the Dum-Dum sub-division of the 24-Pergunnahs district the silting up of the Labornabati river near Kadihatti and Gumpore interferes with the drainage of the villages round the cantonment, and this is believed to be the cause of the annual outbreak of fever in these villages. A committee has been appointed to inquire into, and report on, the sanitary condition of these villages; but the final report of the committee was not received when the year closed. The unhealthiness of the sub-divisions of Baraset, Baripore, and Bussoerhat is also attributed to defective drainage, and in the last-mentioned sub-division the defect is said to be chiefly owing to the silting up of the several streams and rivulets which formerly drained into the lakes of Bockra Chowdry, Kontura, Bullee, Kalinga, Baor, &c. The water in the Jaboona is said to be also stagnant at certain times of the year owing to the mouth of the river having silted up below Tribanee, on the Hooghly.

It has been alleged that the cause of the fever in the Moorshedabad district is to be found in the natural formation of the country. There are throughout the district numerous and very extensive jheels, which have undoubtedly been old beds of the Bhagirathce, having banks as high as the present river of that name. These large jheels not only act as receptacles of large volumes of water during the rains, which steadily undergo the process of evaporation during the other seasons of the year, but, owing to the height of their banks, they interfere seriously with the natural drainage of the whole country in that half of the district the slope of which is from the river towards the east first, with afterwards a secondary fall to the south. Then, again, there is a large tract of low land on the south-east portion of the district, called the Kalluntur, which is annually inundated to an average depth of ten feet by the overflowing of the Jellinghee. When the waters recede, this vast tract is exposed to the influence of the sun, and the long-continued evaporation is believed to produce malaria, from which a very large proportion of the population suffers severely.

The mortality from fever was very heavy in the Dinagepore district. After the heavy rainfall in September the river Poornabhaba overtopped the dam made to keep it out, and flooded the civil station; a great and general increase of sickness followed on the subsidence of the floods. Fifteen out of seventeen adult Europeans are reported to have been compelled to leave the station during the year, broken down by repeated attacks of fever; and an examination of nearly 1,000 native residents showed that more than one-half had marked enlargement of the spleen, while the health of nearly three-fourths had been shattered by disease. The remedy for so distressing a state of things is, no doubt, an improved system of drainage and protection from floods. A scheme for securing these objects was towards the close of the year under the consideration of a committee specially appointed for the purpose. Their report was not received when the year closed.

In the Pubna district, again, the town of Shazadpore, where fever prevailed most fatally, is said to be in a very insanitary condition. The supply of good drinking water was deficient, and the creek, about seven miles in length, which passes through the town and formerly contained running water throughout the year, and connected the large rivers Hoorra, Sagur, and Boral, had become obstructed at its connection with the former river, causing the water to stagnate in several places.

Fever was more fatal at Serampore in 1877 than in 1876, and in explanation of the cause of this increased mortality, which was for the most part confined to the villages situated along the banks of the Hooghly from the town of Bhuddressur to that of Ootterparah, it has been remarked:—"The people of Serampore live in defiance of all sanitary laws. The house-tops and verandahs are sometimes used as latrines, the night-soil being washed into the courtyards or godowns, where it remains to ferment; there are many cess-pits which have remained uncleaned for generations; and drains, river-banks, or other open spaces, are freely used as latrines. Defective drainage is also quoted as an exciting cause. The drainage of the villages has for years been the subject of much anxiety to the municipality. That of the villages of Connagurh and Kishra has been carefully surveyed, many culverts erected where necessary, and drains which had silted opened and cleaned; yet something still remains to be done, which, after a careful survey and report by the District Engineer, is to be undertaken."

The insanitary condition of the above villages has for some time past been the subject of discussion among the Commissioners of the Serampore Municipality. A scheme for draining these villages, prepared by Mr. Pellew, late Magistrate of Hooghly, has been since adopted by the Commissioners, and a plan and estimate are under preparation. The Commissioners have been urged to take the matter up in earnest, and lose no time in carrying out a scheme which is so likely to improve the health of the locality.

Excessive rain and stagnant water have been referred to as the cause of the severity of the fever in the Chogdah Union, in the Nuddea district, and the rail and ferry roads are said to interfere with the natural drainage of this locality. Again, in the Barrackpore subdivision of the 24-Pergunnahs district, the fever, it has been said, was

chiefly confined to the tract of the country which lies between the river-bank and the railway embankment, and extends from Kadihatti in the Dum-Dum sub-division to Nyehatti. The drainage of this tract is away from the river and to the eastward, and it is believed that there is not sufficient waterway through the embankment, and that consequently the soil has become water-logged. The attention of the Public Works Department has been drawn to these obstructions to drainage.

The improvement of the drainage of towns and of village sites is a subject to which the greatest importance attaches, and there is no room for doubt that one at least of the chief causes of unhealthiness in Bengal, and of the fevers which in late years have done so much injury and have caused so much misery, suffering, and mortality among the people of large tracts of country, is the excessive humidity of the soil caused by obstruction to drainage. Except in a few cases, in which the obstruction to drainage is effected by artificial means, such as roads, railroads, and embankments, the obstruction is chiefly natural, being caused by the silting up or destruction in other ways of old water-courses, through which the surplus drainage from the villages flowed to the neighbouring low lands, and the surplus water of these low lands was carried into rivers or other natural outlets. There is, no doubt, very great truth in the statement that the natural course of the drainage of Bengal villages is too often overlooked in investigating the causes of outbreaks of fever; and the instances of impeded drainage mentioned above may be held to furnish arguments in support of this theory.

In recent orders of Government the attention of all local officers was directed to the injurious consequences arising from obstructions to drainage. Commissioners have been asked to furnish a full report on each of the cases of defective drainage affecting public health mentioned in the Sanitary Commissioner's report, and on the measures which it is proposed to adopt with a view to applying a remedy. The Public Works Department of this Government has also been asked to instruct the Executive Engineers in the interior to place themselves at once in communication with the District Magistrates on the subject.

So far as the funds at the disposal of Government permit, grants have been promised to assist district officers and public bodies in carrying out any really useful scheme to improve the drainage or to provide pure drinking water in places where it may be needed. In the majority of cases expensive works are not required. Very often indeed the expenditure of a few hundred rupees will give relief to the population of extensive tracts. It may be urged that as the money expenditure in most cases would be so small, the sufferers might reasonably be expected to help themselves. But associated labour for the public good is not generally to be expected in the present day from the native population. What is required to be done must as a rule be done either wholly or in part by public officers or public bodies.

Vaccination.

THE general results of the vaccine operations in Bengal during the past year, though comparing favourably with those of 1875-76, were not quite so satisfactory as those of 1876-77. The total number of persons vaccinated during 1877-78, including those re-vaccinated, was 1,284,027, against 1,509,034 in 1876-77 and 1,086,373 in 1875-76. The number of persons vaccinated by the staff of Government vaccinators in the several circles of superintendence, and by vaccinators working under the superintendence of the civil surgeons of the several districts, during the past four years is shown in the following comparative table:—

	1877-78.	1876-77.	1875-76.	1874-75.
Calcutta and Suburbs	52,861	37,472	40,173	41,300
Metropolitan Circle	457,757	521,950	471,856	402,385
Darjeeling Circle	228,864	330,218	136,905	120,669
Ranchee Circle	18,963	60,142	13,814	27,343
Sonthal Pergunahs Circle	23,240	42,822	30,300	22,867
Eastern Bengal Circle	150,915	169,534	96,840	110,950
Orissa Circle	36,370	21,868	1,293	.....
Behar Circle	15,444	11,423	4,328	.....
Dispensary Vaccination	294,613	340,305	280,854	234,159
Total	1,284,027	1,509,034	1,086,373	959,673

In the Calcutta, Eastern Bengal, Orissa, and Behar Circles the number operated on in 1877-78 exceeded the number in the previous year by 32,293, while in the remaining circles it fell short by 211,608. Dispensary vaccination also showed a decrease of 45,692 cases. The increase was greatest in the Calcutta Circle, where 15,389 persons were vaccinated in excess of the number operated on in 1876-77. More than half of this increase was accounted for by the greater number of emigrants vaccinated in the depôts in Calcutta and the suburbs, and it was doubtless also to some extent due to the efforts made to arrest the progress of an epidemic of small-pox which broke out in the town. The amount of work performed in this circle, as well as in the Eastern Bengal Circle, during the past year was greater than in any of the preceding five years.

Not only was the amount of work performed during the past year smaller than in the previous year, but its success was slightly less, and its cost greater. The total number of successful operations was 1,182,665, against 1,458,286 in 1876-77. In primary vaccinations the ratio of successful cases to the total number of operations fell from 98·18 to

98.04 per cent. There was a decrease in all the circles except the Sonthal Pergunnahs and Behar, which showed a slight improvement. As in previous years, the ratio of successful cases to the total number of operations was highest in the Calcutta, Eastern Bengal, and Metropolitan Circles, in each of which it was above 99 per cent., and lowest in the Ranchee Circle, where it was only 89.07 per cent. In re-vaccinations the percentage of successful cases to operations was 21.26, against 20.68 in 1876-77. Four hundred and sixty-seven re-vaccinations were performed in the Metropolitan Circle, against five in the previous year.

Of the 1,284,027 persons vaccinated during the past year the sex, age, and caste of 1,148,312 were recorded. Of these 53.38 per cent. were males and 46.61 per cent. females; 48.03 per cent. were Hindus, 46.06 per cent. Mussulmans, .37 per cent. Christians, and 5.52 per cent. 'other castes'; 9.06 per cent. were infants under one year of age, and 90.93 per cent. were above that age. Compared with the statistics of the previous year, there was a considerable increase in the proportion of Christians, and also of infants under one year of age.

The circle system of vaccination was extended during the past year to the districts of Manbhoom, Singbhoom, Midnapore, Bankoora, Beerbhoom, Moorshedabad, Furneah, Maldah, Bhagulpore, and Monghyr. The first two districts were included in the Ranchee Circle, the four next in the Metropolitan Circle, Furneah and Maldah in the Darjeeling Circle, and Bhagulpore and Monghyr in the Sonthal Pergunnahs Circle. Extra vaccinators and inspectors were sanctioned for all these circles, and an additional Deputy Superintendent for each circle, except the Sonthal Pergunnahs. For the districts of Manbhoom, Singbhoom, Midnapore, and Bankoora no paid vaccinators were sanctioned, but the work was carried on under the supervision of inspectors by the ex-inoculators, who for some years past have been practising vaccination in those districts on their own account. The twenty-four apprentices attached to the Metropolitan Circle were added to the regular staff of that circle as 5th grade vaccinators, their pay being at the same time slightly increased.

The total cost of vaccination during the past year was Rs. 1,23,140, against Rs. 1,18,731 in 1876-77. The share of the expenditure defrayed by Government was Rs. 1,09,577, against Rs. 1,07,657 in the previous year. The amount paid from municipal and other local funds was Rs. 13,563, or 11.01 per cent. of the whole. This shows a slight improvement over the previous year, in which the contribution from local funds was Rs. 11,074, or 9.3 per cent. of the total expenditure. The average cost of each successful operation was one anna and seven pies, against one anna and three pies in 1876-77 and one anna and ten pies in 1875-76. In the several circles the average cost ranged from one anna and three pies in the Eastern Bengal Circle to eight annas and eight pies in the Ranchee Circle. In the Eastern Bengal Circle it was the same as in the previous year; in the Calcutta, Orissa, and Behar Circles it was lower; and in the remaining circles higher than in 1876-77.

The total number of ex-inoculators and others who practised vaccination on their own account during the past year was reported to be 1,278, against 1,099 in 1876-77. They worked in large numbers in the districts of Monghyr, Bhagulpore, and Sonthal Pergunnahs. In the first-named district so many as 272 received licenses to practise. In Bhagulpore 210, and in the Sonthal Pergunnahs 75, ex-inoculators are said to have vaccinated 7,544 and 46,481 persons respectively. Sixty-six licensed vaccinators worked under the supervision of four inspectors in the districts of Midnapore and Bankoora, which were included in the Metropolitan Circle and vaccinated 82,941 persons. A system of self-supporting vaccination was also organized in the Satkhira subdivision of the district of 24-Pergunnahs. Ex-inoculators are said to have performed 3,634 vaccinations in Jessore and 5,102 primary operations in Beerbhoom. Sixty-nine licensed vaccinators under three inspectors were at work in the districts of Dinagepore, Rungpore, Bogra, and Rajshahye in the Darjeeling Circle, and performed 63,429 vaccinations, of which 99·34 per cent. were successful. In the Manbhoom district 69 operators performed 41,128 vaccinations, of which 17,393 were inspected and 86·89 per cent. reported to have been successful. In Lohardugga 25 vaccinators and in Hazareebagh 11 ex-inoculators performed 26,254 and 10,576 operations respectively. From the readiness of the people to accept vaccination from licensed ex-inoculators it appears probable that before long it will be possible to withdraw paid vaccinators from several districts, and leave the work to licensed vaccinators under efficient control and supervision.

During the past year Calcutta was visited by a severe epidemic of small-pox. The outbreak began in October 1877, but was not reported to the Superintendent-General of Vaccination till November. By a vigorous effort the progress of the disease was temporarily arrested, but isolated cases carried the infection into other localities, and by the end of January small-pox had sprung up all over the town, in spots widely separated from each other. In March the number of deaths was 287, against 33, the average of the preceding ten years. From the beginning of January to the end of April 750 deaths were recorded, and it is believed that only about one-fifth of the mortality was registered. The Superintendent-General of Vaccination at the Presidency considers that the epidemic was more severe than any that had occurred since 1865. No satisfactory explanation was furnished of the outbreak; but although, compared with the rest of Bengal, Calcutta is well protected against small-pox, there are among its residents many who still neglect or object to be vaccinated. The question of making vaccination compulsory within the town of Calcutta is under the consideration of Government.

VII.—INSTRUCTION.

Education.

THE circumstances of the year 1877-78 were favourable to the progress of education. The financial position of the Government no longer compelled it to enforce those reductions in expenditure which had to some extent crippled the operations of the previous year, and the educational grant was raised from Rs. 24,67,236 to Rs. 25,10,940. The removal of this absolute limitation of expenditure stimulated and developed private effort in a corresponding degree; and while the gross expenditure from Government treasuries advanced from Rs. 24,61,599 to Rs. 25,19,861, the departmental receipts were raised from Rs. 4,71,814 to Rs. 5,19,803. The net Government expenditure amounted, therefore, to Rs. 20,00,058, showing an increase of only some Rs. 10,000 over the net expenditure of the previous year. It is a source of just satisfaction to the Government to find that its efforts in promoting education are so promptly and efficiently seconded by corresponding exertions on the part of those for whose benefit the department of education chiefly exists, and that three-fourths of the additional expenditure which the Government was prepared to incur have been met by increased contributions from the people at large.

The figures of receipts adopted above are those furnished by the Accountant-General, and they refer only to those sums which have been credited in Government treasuries. The departmental return of receipts and expenditure, which includes the charges on account of medical education (Rs. 2,24,000) and of buildings constructed by the Public Works Department (Rs. 72,000), shows also the amount of private contributions in schools of all classes. From this statement it appears that out of a total expenditure on education of, in round numbers, Rs. 44,85,000, the Government contribution amounted to Rs. 22,85,000, while the people paid Rs. 22,00,000, their contributions

in the previous year having been Rs. 19,82,000. Hence the Government contribution to the total cost of education, which amounted in 1875-76 to 57 per cent. and in 1876-77 to 53 per cent., has again decreased during the year 1877-78 to 51 per cent. of the gross expenditure.

In the Administration Report for 1876-77 it was observed that while there had been some increase in the number of schools of organized instruction and a slight decrease in the number of pupils in those schools, the increase had been confined to the department of primary instruction, while nearly every branch of secondary instruction had suffered loss. At the same time it was shown that the total number of schools, aided and unaided, which were known to the department, had advanced from 17,850 to 21,478, and the number of pupils in them from 535,804 to 589,351. The returns for the year 1877-78 show that education has entirely recovered from the temporary check to which it was exposed in the previous year. The increase in the number of schools is not only as great in extent as in that year, but is much more satisfactory in character. On the 31st March 1878 the total number of schools had increased from 21,478 to 26,218, and that of pupils from 589,351 to 641,400. Practically the whole of this increase has taken place in schools of organized instruction, that is, in those which are supervised more or less effectively by officers of the Education Department, and which receive or compete for Government aid on certain fixed conditions. The number of such schools has increased from 15,848 with 468,579 pupils to 19,752 with 531,168 pupils; and the increase has been spread over all branches of instruction and over every class of schools. Unaided schools, which, though not under the inspection of educational officers, have furnished returns to the department, have increased from 5,630 to 6,466, while the number of pupils in them has diminished from 120,772 to 110,232. The cause of this decrease is explained in the following manner. Indigenuous schools have been discovered in Behar in numbers large enough to make up, and more than make up, for the loss in other divisions; but as the average number of pupils to each such school in Behar is only 11, or less than half the corresponding number in Bengal, the net result has been a decrease in the number of pupils.

The detailed figures are shown in the following table, in which the schools are classified according to the source of their income and the grant by which they are maintained:—

CLASS OF INSTRUCTION.	1877.		1878.	
	Schools.	Pupils.	Schools.	Pupils.
Government schools and colleges ...	323	27,831	316	28,728
Grant-in-aid " " " ...	1,857	89,045	1,779	85,563
Circle grant " " " ...	322	12,945	262	10,742
Primary grant " " " ...	13,346	334,758	17,395	408,135
Unaided " " " ...	5,630	120,772	6,466	110,232
Total	21,478	589,351	26,218	641,400

An examination of this table shows that while Government schools have suffered loss (owing to the closing of seven normal schools), the number of their pupils has steadily increased. Grant-in-aid schools have undergone a reduction of 78, of which some were mission primary schools, closed on account of diminished contributions from the parent societies and the consequent contraction of educational operations in India; while from others the grants were withdrawn on the ground that they had for years past been in an unsatisfactory state, and no hope could be entertained of their improvement. The loss in circle schools, which exist chiefly in the Presidency and Dacca Divisions, is confined to the Presidency Division, and more especially to the 24-Pergunnahs, in which district the circle grant appears to have been administered much less successfully, as regards both the quantity and the quality of the instruction, than in Dacca and the neighbouring districts of Eastern Bengal. In those districts the circle grant is almost exclusively devoted to secondary education, as it was intended finally to be, and some of the very best of the middle schools or circle schools. In the Presidency Division, on the contrary, the number of circle schools above the primary stage is insignificant. The administration of this grant has by recent orders been transferred from the Magistrates to the Circle Inspectors, who will doubtless bear in mind the fact that the circle grant was expressly intended to create middle vernacular out of primary school at small cost. Of the increase of 4,000 in the number of primary schools, the chief share is contributed by the divisions of Burdwan and Orissa, in certain districts of which the system of payment by result has been either introduced or largely extended during the past year.

Adopting the nomenclature recently sanctioned by Government, the following table shows the progress of education for the last two years, the class of instruction being now taken as the basis of classification :—

CLASS OF INSTRUCTION.				1877.		1878.	
				Schools	Pupils.	Schools.	Pupils.
Superior	Colleges			20	1,792	19	2,003
Secondary	{ Higher English schools			180	32,957	176	31,688
	{ Middle " "			511	30,072	572	31,818
	{ Middle vernacular ;			1,045	51,718	1,087	53,234
	{ Lower English			112	4,328	...	...
	{ Lower vernacular			1,501	52,650	1,804	56,012
Primary	{ Primary			17,534	399,409	22,126	446,522
	{ Female			480	12,027	519	11,904
Special	... ..			75	4,398	66	3,779
European and Eurasian..						49	4,580
Total				21,478	589,351	26,218	621,400

Though one unaided college has ceased to furnish returns, the number of pupils receiving collegiate instructions shows a marked and satisfactory increase. Under the head of secondary instruction there is a gain of 90 schools and 827 pupils. This, however, does not measure

the whole extent of the increase, since schools for the education of Europeans and Eurasians, which up to last year were merged in the general body of secondary schools, middle or higher, have now been rightly entered as a separate class. If these schools be taken into account, there is a total gain under secondary instruction of 126 schools and 4,256 pupils. The loss in higher English schools is only apparent, those for the education of European boys being now transferred to their proper class. Lower English schools, of which in the previous year there were 112, have under late orders of Government disappeared from the returns. They no longer exist as a separate class; and the individual schools have been transferred, some to the class of middle English schools, others to that of middle vernacular schools, and others again to that of lower vernacular schools, out of which they originally sprung. All these classes of schools manifest considerable progress, both in numbers and in attendance, the extent of which is by no means explained by the transfer just described, but affords convincing proof of the vitality, no less than of the stability, of this important branch of education.

The primary schools supported or aided by Government have increased during the year from 12,272 with 302,550 pupils to 16,042 with 360,322 pupils.

Primary education.

Towards the maintenance of these schools the Government contributed a sum of Rs. 2,72,000, out of a total expenditure from all sources of Rs. 7,81,000. It follows, therefore, that for the support of each primary school, with an average of 22 pupils, the Government pays Rs. 17 a year out of a total cost of Rs. 49. The figures showing the private expenditure on these schools cannot of course be regarded as trustworthy in any high degree; but they at least point to the conclusion that, taking one district with another, the policy of Government with regard to these schools is being understood and acted on; that the schools are village schools, established and maintained chiefly by the people for the people; and it is believed that the Government contribution is now known to be of the nature of a subsidy, paid to the school-masters as an inducement to them to teach, and as a reward for teaching, those subjects of elementary liberal education which find no place in the ordinary course of the village pathsala.

In his report for 1876-77 the Director expressed at length his views upon the character of the instruction imparted in the indigenous schools of the country, the effect of the impulse given to primary education by the orders of 1872, the present position of the aided schools with regard to the unaided schools of the country, and the relation and duties of Government to both classes of schools. These views received the general approval of Government, and the experience of another year has established their soundness. In brief, they were as follow:—

- (1)—That throughout the country there is an 'outer circle' of indigenous pathsalas, maintained by the independent efforts of the people, within which lies the 'inner circle' of the aided schools, identical in origin with the former, but differing in character since Government has taken them in hand.

- (2)—That the margin between the inner and the outer circle is greater or less in different parts of the country, but that up to the limits of the outer circle the spread of popular education is possible.
- (3)—That the question of extending education beyond that outer circle has no practical interest for the present generation.
- (4)—That the difference between the indigenous pathshalas and those which Government has taken in hand is mainly the difference between a technical and a liberal education, that of the indigenous pathshalas being confined to the needs of a cultivator's or artisan's daily life; and that it is by liberalising to some extent the education imparted in those pathshalas, without removing their technical character, that they are made available for elementary popular education.
- (5)—That while the necessary result of the action of Government is to modify the course of instruction in all schools which come under its influence, yet that their character as village schools should not be lost sight of; that the Government grant must not be regarded as their chief means of support, nor must the Government standards displace those useful subjects of instruction which have given the pathshalas their chief value in the eyes of successive generations.

From what has preceded, it will be understood that the increase of 4,000 in the number of primary schools means not that this number of absolutely new schools has been established, but that that number of schools already existing, but hitherto unaided, have been taken up into the Government system, have been placed under the supervision of officers of the Education Department, and have offered themselves for future examination, either in the subjects which they have all along taught, or in those additional subjects which the Government desires to introduce. The chief increase has taken place in the districts of Burdwan, Midnapore, and especially Cuttack, which had 600, 500, and 2,300 schools respectively to the number of the previous year.

The system of small stipends and large rewards which last year proved so successful in Bankoora has been introduced into Burdwan. To introduce this system into Burdwan was to revolutionise primary education there; for Burdwan was the district, above all others, in which the pathshalas had been 'improved' to an extent which seemed seriously to impair their popular character. In Cuttack the example set last year in the adjoining district of Balasore has been followed, and in some respects improved upon, with the result that 14,102 pupils from 2,650 pathshalas presented themselves for examination in November 1877, and that 6,983 candidates passed by a higher or lower standard in reading and writing, and 4,271 in arithmetic. The district of Midnapore has now regained its position (wrested from it last year by Bankoora) at the head of the list as regards the proportion of pupils to population in all schools coming under the cognizance of the

department, the numerical ratio per thousand being for Midnapore 28·75, and for Balasore and Bankoora, which most nearly approach it, 27·79 and 27·15 respectively.

Other districts show a large increase in the number of schools under organization, though the increase is in no case so striking as in those which have been named. The system of rewards introduced last year into the 24-Pergunnahs is now fully established.

The Magistrates of Hooghly and Howrah have, at the instance of the Circle Inspector, introduced a somewhat different, but very simple, system into their respective districts. In Moorshedabad, in which district the margin of unaided indigenous schools seems to be exceptionally small, a system of payment by results has likewise been introduced. Experiments in the same direction have been attempted, though as yet to a limited extent, in the districts of Rajshahye and Dinagepore. In Rungpore the introduction of the system is said to have been attended with failure, the number of aided primary schools being less than half what it was in 1876.

The failure may be ascribed to two causes: *firstly*, that the examinations for rewards follow each other too closely, thus leading the teachers to look to Government, rather than to the people, as their chief source of support, and perpetuating the disadvantages of the stipendiary system without the comparatively large stipends which made it attractive; and *secondly*, that the rewards when earned are not punctually paid. Throughout the division of Dacca, with the single exception of the Backergunge district, the old system of payments is still in force. The efforts of the local officers have been directed to the improvement, rather than to the extension, of popular education.

Under the present system the aided schools in the Dacca district are probably surpassed by none in any part of the country. What seems now to be most needed is some scheme for fostering and liberalising the indigenous schools of the country, between which and the aided schools a gulf is fixed that grows wider year by year. In Chittagong the present state of primary education is unsatisfactory; though the permanent economical conditions of the district are very favourable to progress, and only two years ago Chittagong occupied a very high rank in regard to primary education.

In the division of Patna the event of chief importance has been the attempt, more or less successfully carried out in different districts, to collect statistics of unaided schools, which have now been registered to the number of 1,600. Thus the first necessary steps have been taken to extend the limits of the 'inner' to those of the 'outer' circle of primary instruction. Throughout the division of Bhagulpore the Circle Inspector, with the cordial support of the Commissioner, has secured the introduction of a system which utilises the leading gurus of each district in the work of inspection, instruction, and examination.

In Maldah the transition from the old to the new system has been attended with a certain degree of disorganization, although the circumstances furnish no ground for apprehension as to the future.

Of the state and prospects of primary education in the backward province of Chota Nagpore a very hopeful account is given. The Deputy Inspector of Hazareebagh points out that in former days, if there were schools in the province, the poor cultivator at any rate had no share in them. "I can venture to state," adds the Deputy Inspector, "from my experience of 11 years in the province, that before the introduction of the now celebrated scheme of Sir George Campbell one might go from village to village for many miles without meeting a man or a boy who could read him a letter in Hindi. But what changes have been wrought in the short period of five years! Wherever you go now, the first thing that attracts your notice is the rural pathshala; and there is scarcely a village of average population in which you have not the institution, and in which you may not come across at least five or six lads who are able to read and write."

Unlike Chota Nagpore, the province of Orissa abounded from very old days in village schools of an elementary and thoroughly popular kind; and this circumstance has made it peculiarly easy to introduce with success, in two out of the three districts of the province, the system of payment by results. In the three most backward portions of Bengal, namely in Behar, Chota Nagpore, and Orissa, the want of vernacular school-books of every class, which is the great and permanent obstacle to the progress of primary education, is being successfully overcome.

At the primary scholarship examination, the standard for which was generally kept at a high level, 12,985 candidates from 4,474 schools competed, and of these 5,647, from 2,996 schools, passed. The increase in the number of candidates and in that of successful candidates manifests the sound development and the steady growth of a system which is now thoroughly engrafted on the indigenous stock of primary education. The extent of that development is measured in another way by the fact that the number of pupils in primary schools throughout Bengal who are able to read, write, and understand easy sentences in their mother-tongue has advanced, during the year from 103,000 to 153,000.

The scholarships were chiefly won, as it was intended they should be won, by pupils of the humbler classes. Of 403 scholarships 127 were gained by boys of the middle class and 275 by boys of the lower, including 171 sons of cultivating ryots. In other words the lower classes, who form 81 per cent. of the pupils of the pathshalas, hold 68 per cent. of the scholarships. It is also noticeable that half the number of scholars in the lower classes of society are also of the lower castes of Hindoos. The Mahomedans at present win only half their proper share of scholarships, looking to their numbers. But in the Rajshahye Division they gained nearly their full number, while in the 24-Pergunnahs the pupils of Mahomedan gurus were particularly successful.

The area of secondary instruction has been narrowed during the year by the abolition, as a separate class, of the schools ranked as lower or intermediate English. The policy that Government has followed with regard to the teaching of English in schools below those that read to the Entrance standard

of the University may be described as a return to the principles affirmed successively by Sir John Grant and Sir Cecil Beadon. According to those principles the middle vernacular schools established by Government were to be regarded as model schools for the advancement of education among the rural classes, who must always remain strangers to the English language and literature. Side by side with, and attached to, these vernacular schools, there sprang up, however, in many places English classes, whose object was to give those who read the full vernacular course some additional instruction in English. In course of time the English teaching, originally intended to be supplementary and subordinate to the vernacular course, assumed an unduly prominent position. History and other subjects were read in English, and the vernacular was proportionately neglected. It followed, therefore, that all students in such schools, except those few who were afterwards to proceed to a higher English school, received from masters, themselves ill-instructed in English, an education which was imperfect, and in too many cases worthless, both on its vernacular and on its English side. Government has lately declared the necessity of readjusting the mutual relations of English and the vernacular by reconstituting middle English schools on a true vernacular basis. The middle English standard, which in course of time had come to vary widely from that of the vernacular scholarship, has been again identified with it; the only, and sufficient, difference being that candidates for the middle English scholarship are now required to take up English in addition to the full vernacular course. This condition being understood, any school that teaches effectively the vernacular scholarship course is at full liberty to add an English class, and hence it follows that the sound study of English has been really promoted and encouraged by the orders that have been issued. But the logical corollary to those orders was the abolition of the class of lower English schools. If English was only to be taught as a sequel to sound instruction in the vernacular up to a certain standard, it followed that English should be rigorously excluded from schools that could under no circumstances teach to that standard. Of those classed in the last report as lower English, some of the best have become middle English schools; others have abandoned the teaching of English and classed themselves, according to their proficiency, as middle or lower vernacular; while some few have disappeared.

Lower vernacular schools have increased from 1,501 to 1,604, the increase being exclusively due to the rise of Lower vernacular schools. schools from the class below, hitherto classed as primary. The great majority of this class of schools are supported from the circle and primary grants; and the principle has been acted on during the past year, that if a lower vernacular school claims aid under the grant-in-aid rules, the amount should be limited to that of the maximum pathshala stipend, or Rs. 5. The results of the lower vernacular scholarship examination, the second that has been held, were satisfactory. Of 1,604 schools of this class 993 sent candidates to the examination, and from 702 of those candidates passed. It is not of course to be expected that schools originating, as these do, from

very humble beginnings will at once, or very soon, reach the full standard of their class. Each lower vernacular school is supported at an average cost to Government of Rs. 51 yearly.

The number of middle vernacular schools has increased from 1,045 to 1,087. The increase is due partly to the transfer of lower English schools, and partly to the conversion of weak middle English schools to this class. On the other hand the addition of an English class to a certain number of vernacular schools has made the increase less than it would otherwise have been. The condition of these schools is generally satisfactory. In Eastern Bengal and in the division of Rajshahye their high character and great popularity are especially noticeable. As might be supposed, it is in the more backward districts that these schools chiefly need support. In Behar the vernacular is not much valued; English is the only language that can successfully compete with Persian; and hence the new orders sanctioning the introduction of English into vernacular schools may be expected to have marked effect. It is the same in Orissa. For the wants of the people these schools are either too high or too low; they are too high for the ordinary requirements of a rural population, and they are too low for those who look to Government or professional employment.

The number of middle English schools has advanced from 511 to 572. The increase has been general throughout Bengal, and is due to the two causes already mentioned, namely the abolition of lower English schools and the addition of English classes to vernacular schools. It is satisfactory to learn that public opinion has been practically unanimous in favour of the change that has been made in the constitution of English schools and the basis of English teaching. In the last middle vernacular scholarship examination out of 1,087 schools of this class 887 sent candidates to the examination, and 637 schools were successful, passing altogether 1,573 candidates. At the middle English scholarship examination out of 572 schools 308 competed, and from 247 of these schools 934 candidates passed. These figures mark some advance over the results of the previous year, but it is evident that the 'inefficient margin' of middle schools, and especially of middle English schools, is still very wide.

The class of higher English schools shows but little variation. The number is 176, against 180 returned in the previous year, the apparent loss of four schools being due to the separation of European and Eurasian education. This important class of schools continues steadily to advance in efficiency and in public favour, and the Government schools alone show an increase of 640 pupils. The proportion of schools whose pupils fail to pass at the Entrance Examination is small, and some of the weaker schools of this class are now undergoing reduction or reorganization. Others, again, are maintained chiefly on account of the dignity bestowed by the proprietorship of a higher class school; they occasionally send a candidate to the examination, but the real work they do is that of a good middle school, and the grant they enjoy is a middle school grant. If they do not always reach the standard at which

they aim, they at least carry instruction beyond the middle standard, and at no greater cost to Government.

For the Entrance Examination of December 1877, 176 schools sent up 1,991 candidates, of whom 844 passed, 17 per cent. of these being placed in the first division, 46 per cent. in the second, and 37 per cent. in the third. Of the whole number of candidates 42 per cent. were successful; but while among the candidates from private and aided schools 36 and 34 per cent. respectively passed, among those from Government schools the proportion of successful candidates was as high as 54 per cent. Each Government school, with an average of 288 pupils, costs Government Rs. 2,720 a year out of a total expenditure of Rs. 8,396; while each aided school, with an average of 112 pupils, costs Government only Rs. 580 a year out of a total expenditure of Rs. 2,340. It is therefore to be expected that the former class of schools should be stronger and more successful than the latter.

The system of net grants to zillah and collegiate schools, and to madrasahs, has secured the financial prosperity of those institutions. The total amount of the balances at credit of net-grant schools on the 31st March 1877 was Rs. 82,564, which was regranted to those institutions during the following year. In the course of that year expenditure to the amount of Rs. 22,349 was sanctioned from the balances, and a further sum of Rs. 15,766 from invested funds arising from the savings of previous years. Yet it appears that the total amount to be regranted by Government as the surplus balance in favour of those schools on the 31st March 1878 was Rs. 78,774, showing a reduction, notwithstanding the expenditure incurred in the interval, of only Rs. 4,000 upon the surplus balances of the previous year. It follows, therefore, that the schools worked during the year at a profit of some Rs. 18,000. Out of the whole sum expended upon net-grant schools out of their surplus funds nearly Rs. 25,000 were expended upon buildings, thus causing a saving to the same extent in the expenditure of the Public Works Department. Still the total net grant appears to be considerably in excess of the necessary requirements; and when the period of three years, for which the grants run, comes to an end in March 1880, it is probable that large reductions can be made.

The total number of colleges teaching to the standard of the B.A. Examination is now seven, the Bauleah High School having been raised during the year to the status of a full college, under the title of the Rajshahye College. The permanent establishment of this college is as yet undecided, as it is still somewhat doubtful whether the districts of Northern Bengal will supply the college year by year with a sufficient number of pupils to justify the outlay involved in maintaining a large staff of professors. At present the bulk of the expenditure is borne by the Rajshahye Association, who have contributed funds amounting to Rs. 1,50,000, the whole of which will shortly be invested. Second grade colleges, teaching to the First Arts standard, now number five. The aided colleges are six, as in the previous year, and there are three unaided colleges. The number of pupils in all colleges has increased

during the year from 1,792 to 2,003. But the intensity of the desire that exists for collegiate education is best illustrated by the fact that the number of college students is now nearly twice as great as it was in 1874, when it amounted to 1,083 only. During these four years the Government and the High Court have, by various steps, raised the standards qualifying for admission to the executive and judicial services, and to the legal profession, and have offered considerable inducements to those whose abilities were attested by University degrees. The Senate of the University has moved in the same direction. Students who have passed the Entrance Examination find it yearly more difficult to qualify themselves for any profession unless they go forward to a University degree. The eager desire that has been manifested in many parts of the country for the establishment of new colleges affords a convincing proof of the value attached to collegiate instruction.

For the first examination in Arts 613 candidates appeared and 184 passed. The proportion of successful candidates was much lower than in previous years — a result which is ascribed, as regards Government colleges, to the fact that the vacancies in the graded list caused by the casualties of 1876 and previous years, which had never been fully supplied, made it quite impossible to bring the staff of the Government colleges up to the requisite strength, and also made it necessary to transfer officers in a way very detrimental to efficient teaching. For the B.A. Examination 163 candidates appeared and 51 passed. The Government colleges to some extent recovered their position, passing 40 per cent. of their candidates, while aided colleges passed only 29 per cent. The Kishnaghur College redeemed its failure in the First Arts Examination by considerable success in the examination for the degree. The Cuttack College, in this the first year of its competition for the B.A. degree, failed altogether. The experimental establishment of this college was designed rather to test the desire of Uryas for high education than to try the possibility of carrying on a full college with a staff of ungraded officers. The dearth of graded officers has hitherto prevented the strengthening of the establishment of the Cuttack College, and has interfered a good deal with the efficiency of the other colleges. For the M.A. Degree Examination there were 28 candidates, of whom 15 passed. A high opinion was expressed of these candidates, as in all respects the most satisfactory outcome of the University system; and several such students have been selected during the past year for responsible and honourable employment under the Government of Bengal.

The department of special instruction comprises the subjects of law, medicine, and engineering, surveying schools, industrial schools, and the School of Art. The number of law students in the classes attached to five Government colleges has increased from 222 to 316; but in every other branch of special instruction the number of students has seriously declined. In the Medical College of Calcutta they have fallen from 176 to 145; in the Engineering Department of the Presidency College from 124 to 87. As regards instruction of a lower class, the pupils in vernacular

medical schools have declined from 862 to 686, while in vernacular survey schools the number remains constant at 160. Technical schools number 148 pupils, against 116 in the previous year. The attendance at the School of Art has fallen from 119 to 89. The causes of this general decline have been in operation for some time past. Fewer students enter the Medical College than in former years owing to the substitution of the First Arts for the Entrance certificate as the qualification for admission. The Government demand for trained Engineers is not great enough to absorb the supply of graduates from the Civil Engineering College, and the private demand is still small. The novelty of the vernacular medical schools has to a certain extent worn off; new pupils are admitted in smaller numbers than before, and many of the old pupils have ceased to attend. No doubt, however, can be entertained of the ultimate success and permanent usefulness of some of these schools. It is the same with the vernacular surveying schools. The pupils are generally well taught, and become efficient surveyors.

The scope of the artisan school at Dehree has been enlarged during the year, and its standard considerably raised.

Dehree artisan school.

The Government of India required that the course should be so framed as to qualify the pupils for the position of foremen mechanics in a workshop rather than for that of overseers in the Public Works Department. The standard has been revised in accordance with these instructions, and comprises a theoretical course of considerable depth, in addition to practical work in the shops occupying six hours a day; and if with the existing staff that standard can be reached, there can be little doubt that the Dehree school will turn out a body of young men qualified to take charge of workshops. The Government of Bengal have taken farther steps during the past year to establish schools of technical instruction. A committee was appointed to examine and report upon the means of providing thorough technical instruction to those who wished to adopt one of the branches of engineering as a profession. It was fully understood that if such a school were established it must be attached to a workshop on a large scale. For such an enterprise a mere toy workshop is of no service. If useful and thorough instruction is to be given the school must be attached to a real workshop, conducted on sound business principles and fulfilling its own purposes quite independently of the school. The Civil Engineering College already turns out two classes of students; those who are qualified to become engineers of roads and bridges, and those who aspire to subordinate appointments of the same kind. The proposed school or college, similarly, will comprise two courses for two separate classes of students: the upper course for those who desire to become mechanical engineers of the highest class and directors of large manufacturing establishments, and the lower course for the training of overseers of shops and factories, foremen of works, &c. While theoretical and practical training are combined in both, the upper course will carry theoretical instruction to a much higher standard. For neither of these two purposes is special proficiency in a single trade needed: it will be sufficient if a man has such practical skill as may be gained by four years' work with his own

hands alternately in the pattern-shop, the forge, the foundry, and the fitting-shop. These proposals do not involve the training of mechanics, that is, of men skilled in particular trades only. It is thoroughly understood that in order to produce workmen of this class nothing can supersede the ordinary mode of apprenticeship. No school is needed for this purpose; the only school in which a man can learn his trade is the workshop. But in proposing to establish a school for technical instruction, it is hoped not only that students will come forward in sufficient numbers to acquire an education which will now for the first time be placed within their reach, but also that, having acquired that education, they will find abundant opportunities for turning it to practical account. The absence of any future career for students so trained has been sometimes urged as a reason why Government should not enter upon the field of technical instruction; but if the training given to students is good of its kind the supply will create the demand, and that employers of skilled labour of the highest kind will find their advantage in securing upon the spot, and at a comparatively cheap rate of remuneration, engineers and foremen, whom they have hitherto been compelled to import at great expense from Europe. The demand for this class of labour is daily increasing, and must extend with the development of railways and factories which is now going on.

The School of Art has lost 30 students, the number on the rolls at the close of the year being 89. The number

The School of Art.

has been steadily diminishing since 1875, when it amounted to 169. In that year the monthly fee was raised from Re. 1 to Rs. 3, and the school is consequently attended only by those who have a genuine desire to follow one of the branches of art as a profession. Under the present regulations students not only leave the school much less capriciously than in former years, but they remain for a longer time. The work done by the pupils is gradually gaining in public estimation as its character becomes more widely known. Designs for cotton goods, which were made for the Indian market by students of the school at the instance of a mercantile firm in Calcutta, have been described as most successful and much better adapted to the purpose than English work of the same kind. The same favourable opinion was recorded of some lithographic work turned out by the school. A large number of surgical and anatomical drawings made by two of the students of the school, for the illustration of lectures in the Medical College, have been found to be admirably suited to their purpose.

The Art Gallery, which was opened in 1876 in connection with the School of Art, has now been placed upon a permanent basis, an annual grant of Rs. 10,000 being set apart for the maintenance of the establishment and the purchase of works of art. A committee of gentlemen interested in art has been appointed to work with the Principal of the school in carrying out the objects of the gallery, and steps are being taken to procure such copies and original paintings from Europe as may best tend to cultivate the taste and inform the minds of the students of the school. The gallery is also open to the public.

In accordance with the policy explained in previous resolutions, the number of normal schools was reduced during the year from 31 to 24, and further reductions have since brought the number down to 17, of which seven only are of the first grade. Normal schools of the lowest grade, designed to supply teachers to primary schools, are now only maintained in those backward parts of the province where the natural supply of qualified teachers, as tested by the primary scholarship examinations, is found to be insufficient. Even in backward districts, however, the system of payment by results is found to increase the natural supply of competent gurus, and makes the maintenance of normal schools less necessary. The number of first grade normal schools has to be regulated so as to supply trained pundits to the whole of the middle vernacular schools of Bengal; and this principle has been followed in determining their local distribution. The only second grade school remaining is that at Chittagong. The best of the first grade normal schools is that of Hooghly. The Calcutta school failed conspicuously in the final examinations, and there would be no reason for maintaining it beside the very flourishing institution at Hooghly, but for the fact that the model school attached to it is so well attended and prosperous that its profits help to pay the expenses of the normal school. There were altogether 224 candidates for certificates at the vernacular mastership examination, of whom 150 passed, against 163 out of 278 in the preceding year.

The following figures show the progress in native female education during the year. The number of schools increased from 464 with 10,492 pupils to 519 with 11,964 pupils, but the number of girls in boys' schools decreased from 9,794 to 9,623. Altogether there were 21,587 girls under instruction, against 20,286 in 1876-77. The improvement in numbers is seen in all the stages of progress, though of course greatest in the lower primary stage.

The reports of the Government Inspectress of Schools have thrown much light upon the character of the teaching given in the schools and classes visited by her. In Calcutta she examined 23 schools with 1,042 pupils and 97 zenana classes with 117 pupils. She also reported on the zenana pupils and schools in the districts of Dacca, Tipperah, Backergunge, and Furreedpore. Government is paying for zenana teaching in Calcutta and the mofussil Rs. 16,420, of which Rs. 14,804 are expended in Calcutta alone, almost entirely in grants to missionary societies, which themselves contributed to this object Rs. 46,500. Of the total receipts only Rs. 7,986 were raised by fees from 1,827 pupils, less than six annas a head per month. It is found that the zenana teachers employed by the missionary agencies are very frequently quite unfit for their work, and that the great majority of the pupils have had none of that preliminary instruction in school to complete which is the object of the Government grants in aid of zenana missions. The time given by the teachers to each house averages, moreover, only two hours a week, including the time devoted to Bible stories and needle-work. Much of the unfavourable result appears to be due to the pressure brought to bear upon the missions from home to show

increasing numbers under instruction year by year. It is, however, absolutely necessary that the principles upon which Government aid is given to these agencies should be reconsidered. There must be, as the Director remarks, at the outset some guarantee of ability in the teachers. They must subject themselves to examination and obtain certificates of fitness. Then, to test the work of these certificated mistresses, there must be graduated standards and examinations for the pupils, and the Government grants must be rated on the results of these examinations. If there could be more co-operation between the societies, or if in other ways zenana pupils could be concentrated and brought together, so as to admit of their receiving more continuous instruction, another great advantage would be gained. At present there is much connected with this work which is not real and genuine.

In the Dacca Division the plan inaugurated under native management of encouraging zenana teaching by rewards after examination has also practically failed, there being strong grounds for believing that the answers were frequently written by the husbands of the girls under examination.

Excluding zenana classes, the aided girls' schools throughout the country increased by 21 with 334 additional pupils, the increase being in girls' pathshalas. Grant-in-aid schools have fallen from 157 to 151. All other descriptions of girls' school are stationary except those aided from the primary grant, which rose from 128 to 151, the increase being chiefly in the Dacca Division. There are besides the aided schools 73 unaided schools for native girls, 51 of which are under missionary management.

There were 36 aided schools for Europeans and Eurasians with 3,389 pupils, and 12 unaided schools submitted returns showing 1,166 pupils in their classes. In future it is intended to classify these schools according to their standards of instruction, as is done in the case of schools for native education. Government gave Rs. 70,246 in aid of schools of this class during the year, and their total cost was Rs. 2,53,255.

There was a satisfactory increase in the number of Mahomedans under instruction, though, owing to the great increase of Hindoo pupils in Burdwan and Orissa, where the Mahomedan population is small, the percentage of pupils of this class was lower on the whole. Out of 523,748 pupils of all creeds in Government and aided schools on the 31st March 1878, 86,847, or 16·4 per cent., were Mahomedans; the percentage of Mahomedans on the total population of Bengal being 31·5. The increase over 1876-77 amounts to 5,262 pupils. Taking all classes of schools, aided and unaided, there were 111,645 Mahomedan students, against 106,590 in the preceding year.

Several new scholarships were given from the Mohsin Fund to enable Mahomedan students of the Mofussil madrassas to continue their English studies either in the Calcutta madrassa or at other Government institutions. The total expenditure from the Mohsin endowment on Mahomedan education is now Rs. 56,532. The Calcutta madrassa has suffered a serious loss in the death of its Principal, Mr. H. Blochmann.

The following table exhibits the distribution of funds under the grant-in-aid system for the last two years:—

	1877.				1878.			
	Number of institu- tions.	Number of pupils.	Receipts from Gov- ernment.	Total receipts.	Number of institu- tions.	Number of pupils.	Receipts from Gov- ernment.	Total receipts.
			Rs.	Rs.			Rs.	Rs.
Colleges	6	556	24,198	1,07,828	6	701	24,136	1,18,600
Higher English schools ...	88	10,365	62,061	3,04,432	84	9,388	48,842	1,96,528
Middle " " "	438	25,101	1,46,801	4,28,698	453	24,906	1,30,463	3,76,289
" vernacular " "	556	28,614	87,574	2,45,019	574	28,914	87,293	2,47,151
Lower English " "	65	2,598	12,176	31,393	...	.....	.....	.....
" vernacular " "	110	4,298	10,552	28,202	130	5,035	7,825	22,637
Primary " " "	285	8,466	14,025	34,785	192	4,876	7,161	19,632
Girls' schools " " "	*204	8,195	64,314	1,88,620	288	7,559	44,537	1,59,771
Boys' " for Europeans, &c.	...	.....	.....	.....	8	1,637	35,458	1,54,425
Girls' " for " " "	...	.....	.....	.....	11	991	19,281	70,574
Mixed " " "	...	.....	.....	.....	18	786	13,987	38,117
Normal " " "	15	852	16,294	46,043	15	775	16,609	42,284
Total	1,857	89,045	4,37,995	14,15,020	1,779	85,563	4,35,702	14,45,408

* Inclusive of European girls' schools.

The only loss is in primary mission schools, schools of other kinds showing an increase of 15. The grants are periodically revised, and it is found that the people are now able and ready to maintain schools on much smaller grants than were formerly deemed necessary. The improved system of inspection which is now being introduced along with the reduced areas allotted to each Inspector will enable the supervision of the grant-in-aid system to be made more close and effective than it has hitherto been.

The aim of the department and of Government during the year has been not so much to extend education as to systematize it, to secure the best possible application of the funds available, and to bring the secondary education of the country back to the sound principles on which it was originally based. At the same time there has been considerable and satisfactory progress. The people show themselves more anxious to get education and more willing to pay for it, and there is gradually being extended all over the country a network of primary schools that must, as the numbers passing through them year by year increase, very shortly effect materially the standard of intelligence among the lower classes.

Literature and the Press.

Act IX of 1878, "for the better control of publications in the Oriental languages," received the consent of the Viceroy on the 14th March 1878. After the close of the official year a translation of the Act was forwarded to the publishers of all vernacular papers in Bengal, and their attention was called to its provisions. A hope was expressed that it might not be necessary to enforce these against any members of the Vernacular Press, but it was also notified that Government did not intend the Act to remain a dead letter, and that seditious language calculated to excite hatred and contempt against the Government or maliciously defamatory of Native Chiefs and officials would undoubtedly cause action to be taken against the offending journal.

The effect of the Act has been to improve very much the tone of the native press; a better class of writers appears to be employed; and thoughtful discussion is, it is hoped, gradually taking the place of the disloyal, scurrilous, and defamatory articles of the past.

The number of native newspapers supplied to the Bengal Library during the year under review, exclusive of two which ceased to exist, and one, the form of which was changed during that period, was 40, against 35 received in 1876-77. Of this number five were daily, 25 weekly, one bi-weekly, five monthly, and four bi-monthly; all were published in Bengali, with the exception of one bi-monthly in Urdu, one weekly in Hindi, one weekly in Persian, three weekly in English and Bengali, and one weekly in English and Urdu. Of the 40 papers supplied to the Library 14 were published in Calcutta, 11 in the Presidency Division, five in the Dacca Division, five in the Burdwan Division, three in the Rajshahye and Cooch Behar Division, and two in the Patna Division. No papers are published in the Chittagong, Orissa, and Chota Nagpore Divisions.

Eight new papers were started during the year; of these the *Hindu Lalana*, a fortnightly journal, is edited by a respectable Hindu lady. This paper deals mostly with social topics, especially such as relate to native females.

The *Bishwa Sukrid* and *Sumaj Durpan*, published in Bengali, ceased to exist during the year; while the *Unrita Bazar Patrika* changed its bi-lingual form and now appears as an entirely English paper.

The total number of uni-lingual books received in the Bengal Library during the year under review (exclusive of periodicals) was 1,063, against 1,045 received in 1876. The subjoined table shows the classification of books according to languages and subjects :—

Language in which written.	Number of original works.	Number of translations and reprints.	Total.	Subject-matter of work.	Number of original works.	Number of translations and reprints.	Total.
Bengali	319	325	644	Biography	12	4	16
English	111	43	154	Drama	47	22	69
Sanscrit	65	34	99	Fiction	88	32	120
Urdu	23	13	36	History	8	14	22
Hindi	21	4	25	Language	60	137	197
Assamese	13	19	32	Law	21	10	31
Persian	1	1	2	Medicine	30	8	38
Sonthal	10	2	12	Miscellaneous	78	11	89
Bengali-Mussulman	4	2	6	Philosophy	13	5	18
Nepalese	18	14	32	Poetry	112	73	185
		2	2	Religion	131	89	220
				Science (mathematical)	23	22	45
				Science (natural and others)	18	26	44
				Travels and voyages	4	.....	4
Total ...	604	459	1,063	Total ...	604	459	1,063

There were also 196 books bi-lingually, and nine tri-lingually, arranged. Out of the four Bengali periodicals noticed as having ceased to exist in the last year's report, the *Bungo Durshan* has revived during the year under review.

The total number of publications of all kinds received in the Bengal Library during the year was 1,576, against 1,512 received in 1876. Of this number 272 were in English and the remaining 1,304 in other languages. Their distribution as regards place of publication is exhibited below :—

Place of publication.	Number published.
Town of Calcutta	1,172
Dacca Division	101
Presidency „	113
Burdwan „	95
Orissa „	39
Rajshahye and Cooch Behar Division	2
Patna Division	48
Assam „	1
Bhagulpore Division	5
Total	1,576

No publications were received from the Chota Nagpore and Chittagong Divisions.

The number of books of which copyright was registered under Act XXV of 1867 in the Office of the Inspector-General of Registration was 1,016 in 1877-78, against 1,018 in the preceding year; while in district offices the figures were 383 and 445 respectively, thus showing a decrease of 64 in the total number of publications registered during the past year.

The expenditure incurred under section 10 of the Act in the purchase of books amounted to Rs. 2,832-9-5, against Rs. 2,543-12 in the previous year, and the fees levied under section 18 to Rs. 58, against Rs. 78 in 1876-77. Two prosecutions were instituted under section 16 of the Act for delay in the delivery of books. In all these cases the printers were warned and discharged on the ground that it was their first offence.

VIII.—MISCELLANEOUS.

Archæology.

NOTHING new or important was discovered during the year under notice. But in the early part of the year it was brought to the notice of Government that certain Burmese gentlemen, who had, under an arrangement authorized by the Government of India in 1875-76, been deputed by the King of Burmah to repair the enclosure of the Buddha Tree and Temple at Buddha Gayá, were working without any systematic plan, and in such a manner as to injure, rather than improve, the buildings. Dr. Rajendra Lala Mitra, Rai Bahadoor, C.I.E., was accordingly requested to visit the place and to report on the work already done and the manner in which the action of the Burmese gentlemen should be controlled by the Government. Dr. Mitra's report shows that the demolitions and excavations already completed by the Burmese have swept away most of the old landmarks, and nothing of ancient date can now be traced on the area on which they have worked. The stone railing built by the Emperor Asoka near the great Temple has been demolished; all traces of the outer courtyard of the Temple and its antiquities have been removed; the terrace round the Temple has been changed, and the inner walls of the spire, the plaster of which was originally moulded with small panels and niches, each containing a miniature figure of Buddha, have been plastered over without ornament of any kind, and whitewashed. The total number of sculptured stones excavated by the Burmese gentlemen is about 2,500. They are, generally speaking, not of much interest. They all belong to types which are already well known to antiquarians, and none of them have any historical value, being mostly single figures of conventional types, which throw no light on the progress of Buddhism or the legends which are associated with it. Out of the total number excavated some have been built into the new wall of the courtyard, some have been carried away by the people of the neighbourhood, and a good number are lying in the courtyard and on the mounds around it. Dr. Mitra has selected 85 specimens, one bearing an inscription of the third century before Christ, and another of the fourth century after Christ. He has made various suggestions as to the repairs and restorations which should be allowed in the rest of the buildings, and urged that the work should be undertaken under

professional supervision. It was proposed to the Government of India that if the Burmese object to place the work in the hands of Government officers, it would be better that Government should itself take up the matter of repairing these interesting archaeological relics to the extent suggested by Dr. Mitra. After some correspondence between the Government of India and the King of Burmah, it has been arranged that the work should be done under the supervision of the District Engineer of Gya, in communication with Dr. Mitra and the Commissioner of Patna.

Economic Museum.

CONTRIBUTIONS to the Economic Museum were received during the year from 43 out of the 56 local committees appointed to collect specimens in districts and sub-divisions. The total number of specimens received in the Museum during 1877-78 was 2,959, of which 2,346 were collected by the local committees and 613 were received from independent sources. At the end of the year the Museum contained 12,460 specimens, illustrating most of the economic products of Bengal.

Attention was given to the important work of having the various classes of products now in the Museum examined and reported upon by commercial experts, and some progress was made in this direction.

A collection of indigenous dye-stuffs was made for the Secretary of State, and between November 1877 and March 1878 fifteen large cases, containing in all 60 packages of dye-drugs (each package containing sufficient to dye on an average 50 yards of cloth) were despatched. The crude dye-drugs were accompanied by a collection of 108 samples of dyed fabrics, exhibiting the various hues and tints produced by them. Lists also had been prepared and forwarded giving the scientific, vernacular, and trade names of all the Bengal dye-stuffs of which it had been possible to secure trustworthy identifications.

Ecclesiastical.

THE ecclesiastical establishment entertained or partly paid by Government in Calcutta and the districts of Bengal on the 31st March 1878 was as follows:—

Lord Bishop of Calcutta	...	...	...	1
Archdeacon of Calcutta and Commissary to the Lord Bishop	...	...	...	1
Domestic Chaplain to the Lord Bishop	...	...	...	1
Registrar of the Diocese and Secretary to the Lord Bishop	...	...	...	1
Chaplains of the Church of England	...	...	...	18
Ditto ditto of Scotland	...	...	...	1
Ministers of the Additional Clergy Society	...	...	...	10
Priests of the Roman Catholic Church, including the Vicar Apostolic of Western Bengal...	...	...	...	6

During the year under review all Government cemeteries in the districts of Bengal were arranged under four classes, and scales of establishment sanctioned in accordance with the orders of the Government of India on matters connected with ecclesiastical administration.

In February 1875 the Government of India ruled that all churches maintained by Government for European soldiers should be divided into two classes, according to the number of sittings provided for the congregation. For the first class, which comprised churches containing more than 400 sittings, establishments costing Rs. 47 a month were sanctioned; while the establishments for the second class of churches, with less than 400 sittings, were fixed at a monthly cost of Rs. 19. With regard to non-military churches the Government of India sanctioned a fixed allowance of Rs. 5 for a servant to act as chowkeydar and bearer, any excess expenditure that might be found necessary for all these churches being met by the congregations themselves. During the year under review these orders were carried into effect. The non-military churches at the Presidency have, however, each been allowed, with the consent of the Government of India, a larger fixed establishment than was proposed, as the allowance of Rs. 5 was found to be insufficient in view of the size of the churches, the cost of maintaining and lighting them, and the comparative poverty of a large portion of the congregations.

which attend them. The following tabular statement shows the financial effect of the revision of the church establishments in Bengal :—

NAME OF THE CHURCH.	Original grant per month.	Revised grant per month.	Increase per month.	Decrease per month.
<i>First Class Military Churches.</i>				
	Rs.	Rs.	Rs.	Rs.
1. Dinapore	55	47	.....	8
2. Dum-Dum	64	47	.....	17
3. Hazareebaugh	46	47	1	.....
4. Barrackpore	50	47	.....	3
5. Darjeeling	31	47	16	.....
6. St. Peter's Church, Fort William ...	* 291 & 316	47	.....	244 & 269
7. St. Patrick's Church, ditto ...	33	47	14	.....
Total ...	570 & 595	329	31	272 & 297
<i>Presidency and Suburban Churches.</i>				
1. St. Paul's Cathedral	400	400	.....	.....
2. St. Andrew's Church	† 282	† 132 & § 217	.....	150 & 65
3. St. John's Church	450	100	.....	350
4. Old Church	300	100	.....	200
5. St. Thomas' Church	150	100	.....	50
6. St. James' Church	300	100	.....	200
7. Kidderpore Church	53	.....	.....	.....
8. Howrah Church	64	.....	.....	9
Total ...	2,001	1,012 & 1,127	.....	659 & 874
<i>Non-Military Churches.</i>				
1. Bankipore, Christ Church ... ..	.....	.....	.....	23
2. Gulzar Bag, St. John's ... ..	.....	.....	.....	2-12
3. Porciah, Emmanuel Church	17	.....	.....	12
4. Cuttack, Epiphany Church	20	.....	.....	24
5. Monghyr, St. John's Church	5	.....	.....	.....
6. Bhagalpore, Christ Church	17	.....	.....	12
7. Midnapore, St. John's Church	15	.....	.....	10
8. Dacca, St. Thomas' Church	41	.....	.....	36
9. Burrisaul, St. Peter's Church	13	.....	.....	8
10. Comillah, Christ Church ... ..	.....	.....	.....	.....
11. Berhampore, Barrack Church	23	.....	.....	.....
12. Chinsurah, Old Dutch Church	40	.....	.....	.....
13. Serampore, Old Danish Church ... ..	.....	.....	.....	17
14. Jessore, Christ Church ... ..	.....	.....	.....	21
15. Gya, St. David's Church	9	.....	.....	4
16. Raneegee, St. John's Church	20	.....	.....	15
17. Mozufferpore, Christ Church	5	.....	.....	.....
18. Motiharee, St. Andrew's Church	4	.....	.....	.....
19. Buxar Church	13	.....	.....	.....
20. Arrah, St. Saviour's Church	5	.....	.....	.....
Total	.....	.....	.....	.....
GRAND TOTAL	{ 2,910-12 & 1	{ 1,171 & }	{ 37 }	{ 1,476-12 & 1,416-12 }

* Rs. 291 in the cold season and Rs. 316 in the hot season.

† Including the church clock, Rs. 32 per mensem.

‡ When there are two chaplains.

§ When there is one chaplain, including the church clock, Rs. 32 per mensem.

Eight marriages were solemnized under the Brahmo Marriage Act (Act III of 1872), being a decrease of five in the number recorded in the preceding year. Of these five were registered at Calcutta, one in the suburbs, and two at Dacca. In all the marriages celebrated under this Act both the parties were Hindoos, except in one celebrated in Calcutta, where the bridegroom was a Hindu and the bride a Christian.

Working of the Brahmo Marriage Act.

Stationery.

THE following figures compare the results of the working of the Stationery Department in 1877-78 with those of the previous year:—

	1876-77.	1877-78.
	Rs.	Rs.
Value of stock at beginning of year ...	4,75,924	3,74,114
Ditto received from England during the year ...	10,41,431	13,44,800
Ditto received back from various offices ...	20,891	14,771
Cost price of local purchases ...	83,635	78,838
Total value ...	<u>16,26,881</u>	<u>18,12,523</u>
Value of stock issued during the year ...	12,47,766	12,50,002
Amount of all charges ...	45,831	46,327
	<u>12,93,597</u>	<u>12,96,329</u>
Value of stock in hand at close of year.	3,74,114	5,62,521

There was an increase of Rs. 3,03,369, or 29·1 per cent., in the value of stores received from England during the year, and a decrease of Rs. 4,797, or 5·7 per cent., in the expenditure for local purchases. The increase was due to three causes—*first*, to the receipt during the year under report of a considerable portion of the provision supply for 1878-79; *secondly*, to provision having been made for a larger supply to meet an expected increased demand; and *thirdly*, to the supply, for the first time, of water-marked paper for use with court fee stamps, which, besides being more expensive than the white cartridge foolscap formerly used for the purpose, was provided in a larger quantity.

Of the cost of local purchases, Rs. 78,838, Rs. 56,111 was expended in the purchase of articles of local manufacture, while Rs. 22,727 was spent in procuring articles manufactured in England, but which had run out of store.

The total charges of the year, including the cost of all the stationery issued during the year, the pay of establishments and all expenditure on contingencies, amounted to Rs. 12,96,329, against Rs. 12,93,597 in 1876-77, showing an increase of Rs. 2,732, or 2 per cent. only.

The increase over 1876-77 was chiefly in the following articles:—Hand-made imperial, royal, and medium papers; machine-made imperial, royal, medium, demy, and double foolscap papers; white and brown cartridge royal, and brown flat demy papers; double royal, royal, and medium printing papers; Bally badamee royal, demy, and foolscap papers; water-marked paper, $13\frac{1}{2} \times 8\frac{1}{2}$; parchment, $20\frac{1}{2} \times 16\frac{1}{2}$; morocco roan and English calf leathers; red-and-blue pencils, red tapes, sponges, water-colours, drawing pencils, goose-quills, magnum-bonum steel pens, and binding and kharooa cloths; also in Bristol boards, imperial size. The increase is principally due to the demands of the Survey, Registration, and Telegraph Departments, of State Railways and of the Superintendent of Government Printing. The water-marked paper has been newly brought into use for documents requiring to be stamped with court fee stamps, and displaces white cartridge foolscap. Bally badamee paper was purchased under the orders of Government for use in place of English printing paper.

The total expenditure both in local purchases and in England for stationery of every description during the last four years was as follows:—

					Rs.
1862-63	...	...	...	...	4,52,307
1872-73	...	...	...	...	4,09,053
1876-77	...	...	...	...	11,25,067
1877-78	...	...	...	...	11,23,638

The subjoined table gives the value of stationery purchased from the Stationery Office by public officers not entitled to free indent during 1877-78 and the previous two years:—

Year.			Value of stationery supplied.			Amount of commission.			Total.		
			Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
1875-76	...	...	12,841	13	3	612	1	6	13,483	14	9
1876-77	...	...	16,637	15	0	831	14	5	17,469	13	5
1877-78	...	...	24,907	14	11	1,244	2	4	26,152	1	3
Increase over 1876-77 ...			8,269	15	11	412	3	11	8,682	3	10

Out of the total amount of Rs. 26,152-1-3 in 1877-78, Rs. 15,245-7-6 were for supplies which were adjusted by transfer in the books of the several Accountants-General. The value of stationery supplied increased by Rs. 8,269-15-11, or 49·7 per cent., and the number of requisitions by 87, or 27·4 per cent.

The value of the articles found damaged during the year amounted to Rs. 409-9-1, against Rs. 4,190-0-5 in 1876-77. The net loss to Government on account of this damaged stock was Rs. 212-10-4, against Rs. 2,606-8 in the previous year.

The sale proceeds of paper-cuttings, iron hoops, old packing-cases, &c., amount during the year under review to Rs. 763-10-2, against Rs. 2,295-15-6 in 1876-77. The decrease is attributed to the "white and tarred canvas" having been used under the orders of Government in packing stationery, instead of tin-lined cases, and to the falling off in the price of deal-wood planks and iron hoops.

The form-store branch is reported to be working satisfactorily.

Under the orders of the Government of India it was arranged that the local Government should pay for all the stationery used by officers subordinate to it from the beginning of 1877-78. To meet this new charge on provincial revenues an addition was made to the provincial assignment of Rs. 4,48,000. The object of this arrangement was to give the local Government a direct financial interest in the consumption of stationery, and thereby secure, if possible, greater economy.

During the year it was noticed that much expense that might be avoided was incurred in connection with the registers and forms supplied through the Stationery Office, and the Board of Revenue was requested to revise carefully the registers and other forms now supplied by the Superintendent of Stationery, with a view to reducing them in size and supplying less expensive paper in their preparation. Important reductions have already been made, and as the total number of forms used every year is very great the saving is likely to be considerable.

The substitution of the Bally Mills paper for certain qualities of English-made paper has resulted in a considerable saving. Up to the 5th August 1878 country paper was purchased to the value of Rs. 33,883. The same quantity imported from England would have cost Rs. 41,306. The saving therefore amounted to Rs. 7,423.

A further economy was effected by the substitution of fuchsine for the red ink prepared from the powder imported from England; the difference in cost may be stated as follows :—

Fuchsine ink.			English powder.		
	Rs.	A. P.		Rs.	A. P.
One ounce fuchsine	...	0 9 5	One dozen quarts pre-	...	
Twelve quart bottles	...	0 8 0	pared for use	...	6 11 0
A chatty	...	0 0 6			
Total	...	1 1 11			

Powder sufficient to produce 500 dozen quart bottles has hitherto been annually imported from England. A quantity of the English powder which was in stock was sold off by public auction, as it was more advantageous to introduce the fuchsine ink at once instead of utilizing the English powder, which would have required the purchase of a large quantity of vinegar to prepare the ink.

During the year under review arrangements were made for recovering from several purely local funds the cost of stationery supplied for the use of offices paid from these funds, together with a commission of 5 per cent. on the cost of the articles supplied.

Printing.

DURING the year under review the printing arrangements of the Government were entirely remodelled. Owing to frequent complaints of delay in the printing of forms at the Alipore Jail Press, and the inability of that press, as formerly constituted, to cope with the demands of the several indenting officers and departments, the operations of the Form Store Department were greatly impeded. It was therefore determined to place the Jail Press on an improved footing. And, as it was found that the presence of other important manufacturing operations at the Alipore Jail interfered with the efficient working of the press, it was resolved to remove the press to the Presidency Jail, where the whole of the convict labour could be devoted to press work, the miscellaneous manufactures of that Jail being discontinued. It was considered that printing work being a speciality in the Presidency Jail could be best managed in conjunction with the Secretariat Press, the work of that press being as far as possible transferred to the Jail. This arrangement was considered necessary, inasmuch as experience had shown that Jail presses had failed of complete success in other provinces owing to their establishments not being sufficiently elastic to meet sudden emergencies. To ensure the success of the scheme, the Jail Press, with all the other presses of the Government, were placed under one officer, who has been styled Superintendent of Government Printing in Bengal.

The material and plant of the Alipore Jail Press were moved into the Presidency Jail premises about the end of December 1877; but owing to delay in providing suitable accommodation the machines and presses were not brought fully into work until towards the end of the year under review. Machines and presses from the Secretariat Press were also sent to the Presidency Jail, and the presses of the Public Works Department and of the *Bihar Gazette* were subsequently added to those at the Jail, where there are now a total of 61 presses and 13 machines besides those used for proof purposes. It has been estimated that this reorganization of the Government Printing Department will cause a saving of about one lakh of rupees per annum. How far these expectations will be realized has yet to be seen.

The earnings of the press during its first three months at the Presidency Jail were, owing to the delays above referred to, and the backwardness of the convicts in their new occupation, very small; but as accommodation became available and the men became accustomed

to their work, the earnings increased steadily. In January the earnings were below Rs. 6,000, but they increased to nearly Rs. 18,000 in August, and there is no reason why they should not exceed Rs. 20,000 per mensem if sufficient and continuous work was provided and long-term convicts of a suitable class could be found for the various descriptions of labour which so extensive a press provides. The number of convicts engaged varied from 441 in January to 713 in September, but in October the number fell as low as 636. Some difficulty has been experienced in procuring suitable long-term convicts for printing work. Of the educated convicts received in the press up to February, about 65 men, who had been trained as compositors and had become efficient in that capacity, had by the end of August been released, and new men of an inferior stamp had to be trained to take their place. This difficulty is further increased by the necessities of Jail discipline, in the maintenance of which many of the most useful men have often to be removed from the press and put to a severer form of labour. Even of the limited number of educated convicts the press has been deprived of the services of as many as 30 in a day from this cause; while in the press-room, where the non-educated men are employed, six or eight presses have occasionally had to remain idle for the same reason.

In addition to the printing work connected with the Form Store Department, the Jail Press now prints the whole of the *Bengali Gazette*, the *Hindi Gazette* (from August 1878), the abstracts of proceedings of the Government in all departments, a portion of the indexes of the Board of Revenue, much of the miscellaneous work of the Bengal Secretariat, such as office forms, &c., and also occasionally the matter set up at the Secretariat; but from the causes stated above it has not been able to take up any portion of the *Calcutta Gazette*, nor the annual reports. However, from the progress made by educated convicts in learning the work of composing, and by juvenile convicts who have been taught to read in the Jail school, there is every prospect of the Jail Press being made more useful, and of its operations being extended, if these two classes of convicts could be supplied in sufficient numbers. Of the two classes, the boys make the more rapid progress and appear to be the more useful.

The work of the Secretariat Press during the first two quarters of the year was specially heavy; but towards the end of the third quarter it slackened, and during the fourth quarter, owing to transfers to the Jail Press and other causes, it was considerably reduced. The value of the outturn of the year was Rs. 2,12,456, against an expenditure of Rs. 1,90,465.

The cash receipts for printing done for non-Government officers amounted to Rs. 11,708. In the publishing department, from miscellaneous sources, the receipts were Rs. 6,480, and from sale of publications, advertisements, &c. (including the *Gazettes* and *Civil List*), Rs. 23,920, making a total for press and publishing departments of Rs. 41,109. The total expenditure of the year for press and publishing departments, including the cost of purchase of presses for Stationery Office work (which have since been transferred to the Jail), was Rs. 2,05,262. The following are the balance sheets of the press and publishing departments.

Profit and Loss Statements for 1877-78.

DR.	PRESS DEPARTMENT.		CR.
	Rs. A. P.		Rs. A. P.
To cost of establishment ..	1,69,754 4 6	By value of work done for	
Ditto contingencies ...	7,610 2 3	all offices	2,12,456 7 10
Ditto postage ...	109 0 0		
House rent at Rs. 300 per		By value of paper recovered	
menssem	3,600 0 0	from private parties ...	1,206 11 2
Wear and tear of printing			
material, at 10 per cent. ...	9,362 1 10		
To value of paper expended			
for private work	1,206 11 2		
Profit ...	21,990 15 3		
Total Rupees ...	2,13,663 3 0	Total Rupees ...	2,13,663 3 0

PUBLICATION DEPARTMENT.

To establishment (including		By proceeds from <i>Calcutta</i>	
the salaries of the Account-		<i>Gazette, Bengali Gazette,</i>	
ant, Despatcher, Sircars,	2,988 0 0	Civil Lists, and other mis-	29,400 9 9
and Gazette Duffries, &c.)		cellaneous publications, &c.	
To portion of contingencies	1,212 5 8		
debitable to Gazettes, &c.			
To postage on account of Ga-	8,918 11 0		
zettes, Books, &c....			
Difference ..	16,251 9 1		
Total Rupees ...	29,400 9 9	Total Rupees ...	29,400 9 9

The profit and loss statement of the *Calcutta Gazette* shows the value of the Gazette printed, with the advertisements, both Government and private, to be Rs. 42,169; and the total expenditure, including printing, paper, postage, establishment, house rent, contingencies, and depreciation of stock, to be Rs. 36,999, or a difference in favour of the account of Rs. 5,170.

STATISTICAL RETURNS.

STATISTICAL RETURNS.

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PART I.

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*Geographical Area of the territories under the Civil and Political Control
of the Lieutenant-Governor of Bengal in 1877.*

Principal Geographical Divisions.					Total area in square miles.
BRITISH POSSESSIONS DIRECTLY ADMINISTERED—					
Bengal	...	...	...	...	69,749
Behar	...	...	...	...	44,174
Orissa	...	...	...	...	10,050
Chota Nagpore	...	...	...	...	27,883
Total directly administered					151,856
TRIBUTARY STATES—					
Cooch Behar Tributary Estate	...	...	...	...	1,307
Orissa ditto	...	...	...	...	14,190
Chota Nagpore ditto	...	...	...	...	16,025
Hill Tipperah	...	...	...	...	2,869
Total					34,391
NATIVE STATES AND TRIBUTARIES—					
Sikkim	...	...	...	...	2,600
Total area of Bengal					188,847

* Excluding the Soonderbuns, 5,341 square miles.

C.—CIVIL DIVISIONS OF BRITISH TERRITORY.

BENGAL. ADMINISTRATION REPORT.

[1877-7]

C.—CIVIL DIVISIONS OF

[illegible]

BRITISH TERRITORY.

9	10	11	12	13	14	15	16	17	18	19	20
How many stipendiary magistrates.	Maximum distance in miles of villages from nearest courts.	Average distance in miles of villages from nearest courts.	Number of police.	Total cost of officials and police of all kinds.	REVENUE.						
					Land.	Excise.	Stamps.	Registration.	Road Cess.	Municipal taxes.	Total of preceding columns.
				Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
15	12	16	583	3,05,803	33,53,477	1,70,861	3,32,299	29,057	1,29,181	80,309	40,95,187
14	8	192	1,58,325	2,08,643	24,367	79,523	5,407	24,462	9,302	3,55,694	
4	250	250	1,08,621	7,20,005	58,729	1,12,701	9,177	64,348	3,408	9,68,398	
12	30	20	564	3,52,469	23,22,009	1,66,461	3,17,698	21,143	1,71,278	28,679	80,27,268
14	40	215	402 305	4,94,654	12,70,658	2,60,731 (Exclusive of Howrah town.)	3,53,422 (12,125) (12,736)	1,54,857 (For Howrah only.)	2,66,976	23,31,505	
4	.....	.....	3,130	23,93,347	37,749	11,59,012 (Inclusive of suburbs and Howrah town.)	16,92,917	42,163	.....	23,72,139	56,03,911
23	29	6	830	5,23,727	16,07,685	2,76,417 (Exclusive of suburbs.)	5,21,503	43,436	1,42,987	4,25,912	30,77,940
16	33	15	589	3,29,578	10,51,385	1,12,685	3,02,915	2,416	1,02,492	63,927	16,55,820
13	38	11	604	2,69,963	10,50,970	86,110	4,49,810	67,295	1,07,155	13,395	17,74,735
10	16	.....	686	3,46,785	13,70,746	1,58,705	2,36,238	13,333	84,639	56,741	19,26,402
7	Criminal 60	15	886	1,77,047	17,38,079	68,986	1,90,818	5,865	91,223	9,057	21,04,688
7	Civil 30	34	379	2,51,977	8,17,532	73,924	1,40,223	6,024	74,838	19,566	11,32,162
11	25	10	458	2,26,595	10,07,923	1,39,403	2,64,639	11,219	1,82,878	9,512	16,15,564
6	.....	.....	240	86,486	4,29,749	39,346	61,767	4,270	53,727	6,267	5,91,326
8	32	8	802	1,39,731	3,84,465	46,869	1,38,721	6,978	11,000	13,909	6,45,032
5	.....	.....	183	1,33,732	49,533	39,770	24,449	196	10,056	6,115	1,31,189
9	.....	.....	295	1,80,358	2,97,180	28,181	76,267	3,967	61,467	2,012	4,69,044
1	.....	.....	.....	16,000	.....	.....	.....	.....	.....	.....	.....
11	48	125	424	3,47,388	4,88,753	1,76,103	4,46,889	28,536	74,405	81,512	12,88,318
9	35	316	374	2,04,871	4,88,888	46,744	2,42,160	18,628	55,115	9,978	8,61,513
13	90	29	603	2,78,626	12,81,362	72,631	2,79,115	39,045	1,59,574	16,111	18,48,711
11	71	16	438	2,43,107	8,40,606	1,97,849	4,62,477	21,898	1,56,978	22,524	17,02,332
8	80	52	323	2,26,517	9,96,955	55,779	3,20,711	15,499	94,045	15,279	14,97,768
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8	58	15	400	2,90,937	6,17,765	69,434	3,06,456	18,925	19,026	17,121	10,48,747
6	37	.....	351	1,27,525	4,06,648	10,865	1,93,404	16,631	75,275	2,648	7,96,471
6	.....	.....	053	2,15,582	.....	.....	.....	.....	.....	.....	.....
16	.....	.....	14,155	85,00,471	2,29,91,794	38,39,492	75,46,692	4,74,249	21,44,824	35,54,892	4,05,51,715
10	.....	.....	567	5,40,597	14,65,641	4,87,158	3,25,510	27,570	92,838	1,38,358	25,37,075
10	40	20	607	2,29,155	13,88,988	2,34,057	2,04,517	18,172	1,08,870	32,316	19,23,880
9	56	35	493	3,33,879	17,62,739	2,25,509	2,88,943	12,527	1,54,763	40,557	20,85,040
9	32	15	387	1,04,567	8,43,728	1,11,309	1,94,274	12,325	1,11,194	26,510	10,81,430
9	53	41	388	2,42,015	3,87,130	1,37,236	3,32,725	15,394	1,41,236	47,133	10,89,854
4	60	41	412	2,04,461	12,38,367	1,55,194	2,41,290	19,332	1,22,248	31,604	18,11,035
4	60	41	334	1,19,508	5,13,446	1,04,173	52,181	14,444	96,601	9,806	7,90,748
10	60	42	384	1,88,986	8,14,680	2,27,126	1,99,136	16,210	1,45,776	52,521	15,52,449
9	45	25	424	2,77,702	5,78,000	1,84,480	2,69,986	11,990	1,04,459	26,151	11,76,156
8	45	25	477	2,25,904	12,73,835	1,97,713	1,87,043	9,435	94,501	18,999	17,81,526
6	40	20	293	99,304	4,17,733	148,448	69,829	5,613	38,327	6,132	6,40,131
13	.....	.....	303	1,35,394	2,26,819	1,16,212	61,064	3,000	601	7,696	4,16,968
07	.....	.....	4,085	27,38,017	1,00,77,166	23,90,707	24,41,500	1,66,617	12,21,524	4,38,883	1,75,36,387

C.—CIVIL DIVISIONS

CHOITA NAGPORE.	Orissa.	Province.
CHOITA NAGPORE.	Orissa.	Commissionerships.
CHOITA NAGPORE.	Orissa.	Names of executive districts.
CHOITA NAGPORE.	Orissa.	How many executive sub-divisions.
CHOITA NAGPORE.	Orissa.	Area in square miles.
CHOITA NAGPORE.	Orissa.	Population.
CHOITA NAGPORE.	Orissa.	Head-quarters town.
CHOITA NAGPORE.	Orissa.	Population.
CHOITA NAGPORE.	Orissa.	Number of villages.

ITALIAN TERRITORY—concluded.

	10	11	12	13	14	15	16	17	18	19	20
Maximum distance in miles of villages from nearest courts.											
Average distance in miles of villages from nearest courts.											
Number of police.											
Total cost of officials and police of all kinds,											
				Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Land.											
Excise.											
Stamps.											
Registration.											
Road Cess.											
Municipal taxes.											
Total of preceding columns.											
	30	25	576	8,61,897	8,38,343	1,02,913	1,61,661	4,286	6,877	34,842	12,56,922
	70	20	422	1,30,980	4,81,492	20,812	22,642	1,058	3,401	8,707	6,25,123
	40	8	510	1,61,417	4,01,713	1,39,296	67,912	3,013	28,328	7,707	6,50,699
	...	...	210	...	...	...	...	...	...	...	...
	...	...	1,717	6,62,803	17,24,248	3,62,021	2,91,836	11,387	91,436	61,256	25,32,714

	70	30	518	1,81,980	1,20,827	1,17,612	71,510	3,646	32,464	12,692	3,88,752
	110	606	606	2,53,781	1,20,001	1,73,032	78,701	4,223	17,898	9,466	3,70,433
	75	178	178	61,543	66,143	15,890	7,861	293	751	1,579	86,529
	60	333	333	1,28,776	88,165	41,890	93,129	9,050	38,140	7,082	2,72,756

	...	...	1,537	6,29,081	3,61,226	3,78,053	2,61,521	12,212	89,256	3,120	11,27,471
	...	...	22,424	1,25,15,372	3,06,27,636	68,71,173	1,05,31,262	6,64,465	35,47,300	40,76,121	6,17,48,317

DISTRICTS.	Inhabited houses.	POPULATION.					Number per square mile.	Christians								
		Men.	Women.	Children under 12 years.		Total.		Europeans.	East Indian and other mixed classes.							
				Male.	Female.											
BENGAL.																
WESTERN DISTRICTS.																
<i>Murshidabad Division.</i>																
1. Murshidabad	485,415	601,104	774,805	334,714	204,603	2,403,475	678	320	207							
2. Hooghly	104,446	200,244	284,726	132,606	81,890	620,472	804	284	0							
3. Bardhaman	222,703	428,128	478,703	241,057	180,385	1,458,520	1,045	708	0							
4. Midnapore	40,502	60,015	62,008	405,053	302,382	2,458,170	610	122	403							
Total	1,409,508	2,385,700	2,713,645	1,240,458	1,008,315	7,231,173	678	1,300	104							
CENTRAL DISTRICTS.																
<i>Presidency Division.</i>																
5. Calcutta	377,745	220,150	121,705	30,366	25,324	4,230,635	63,092	10,270	11,368							
6. Nuddea	332,017	616,160	678,312	378,080	302,100	2,210,047	703	13,707	13,707							
7. Nuddea	343,500	675,807	701,348	372,819	292,747	2,075,021	617	112	29							
8. Moorshedabad	302,501	400,015	610,140	250,720	198,142	1,353,024	825	131	117							
Total	1,400,720	2,605,803	2,701,397	1,347,001	1,087,176	7,881,024	632	23,405	25,312							
<i>Barhuck and Cooch Bihar Division.</i>																
9. Dinapore	264,725	482,784	492,807	245,605	233,184	1,601,924	214	21	...							
10. Faridpur	241,371	528,671	440,033	232,013	210,010	1,410,720	687	101	...							
11. Jangalpur	127,000	210,700	210,442	101,442	101,442	1,410,720	687	101	...							
12. Jangalpur	108,220	340,015	315,454	232,013	198,142	1,410,720	687	101	...							
13. Jangalpur	108,220	340,015	315,454	232,013	198,142	1,410,720	687	101	...							
14. Jangalpur	108,220	340,015	315,454	232,013	198,142	1,410,720	687	101	...							
15. Jangalpur	108,220	340,015	315,454	232,013	198,142	1,410,720	687	101	...							
16. Cooch Bihar State	81,820	170,305	178,013	1,62,380	97,387	418,665	144	20	...							
Total	1,387,027	2,608,082	2,684,650	1,612,803	1,204,113	7,000,028	418	630	27							
EASTERN DISTRICTS.																
<i>Mecca Division.</i>																
17. Mecca	260,503	519,442	444,070	250,333	203,149	1,852,903	610	209	0,752							
18. Burdwan	210,616	407,305	344,003	214,174	170,344	1,511,878	472	71	111							
19. Burdwan	210,616	407,305	344,003	214,174	170,344	1,511,878	472	71	111							
20. Burdwan	210,616	407,305	344,003	214,174	170,344	1,511,878	472	71	111							
21. Hill Tracts and Special State	284,258	450,613	450,044	277,380	230,202	1,410,720	...	30	10							
Total	1,307,341	2,770,008	2,461,110	1,759,813	1,441,324	11,103,020	...	360	0,983							
<i>Chittagong Division.</i>																
22. Chittagong	107,104	287,648	300,501	248,402	200,841	1,137,403	461	142	809							
23. Chittagong	107,104	287,648	300,501	248,402	200,841	1,137,403	461	142	809							
24. Chittagong	107,104	287,648	300,501	248,402	200,841	1,137,403	461	142	809							
25. Chittagong	107,104	287,648	300,501	248,402	200,841	1,137,403	461	142	809							
26. Chittagong	107,104	287,648	300,501	248,402	200,841	1,137,403	461	142	809							
27. Chittagong	107,104	287,648	300,501	248,402	200,841	1,137,403	461	142	809							
28. Chittagong	107,104	287,648	300,501	248,402	200,841	1,137,403	461	142	809							
29. Chittagong	107,104	287,648	300,501	248,402	200,841	1,137,403	461	142	809							
30. Chittagong	107,104	287,648	300,501	248,402	200,841	1,137,403	461	142	809							
31. Chittagong	107,104	287,648	300,501	248,402	200,841	1,137,403	461	142	809							
Total	370,385	561,713	617,788	475,088	352,160	2,025,645	...	214	1,090							
TOTAL FOR BENGAL.	4,551,974	10,838,332	11,007,308	6,262,013	5,088,075	54,211,300	...	26,008	33,325							

[illegible]

DISTRICTS.	Inhabited houses.	POPULATION.						Number per square mile.	CLASS.			
		Men.	Women.	Children under 12 years.		Total.	Europeans.		Christians.	East Indian and other mixed classes.	Natives.	
				Male.	Female.							
Male.												Female.
BEHAR.												
Patna Division.												
26. Patna	2610,514	491,834	657,468	270,483	246,768	1,653,639	742	1,680	590	48		
27. Muzaffarpur	2276,011	522,031	601,824	312,717	287,270	1,772,817	1093	267	146	20		
28. Bharrachung	2226,443	461,703	742,413	412,540	369,078	2,184,482	737	141	80	27		
29. Saran	2361,624	408,847	713,603	380,784	368,523	2,048,400	778	145	20	21		
31. Champaran	2332,324	400,874	607,023	270,083	268,453	1,830,510	708	145	20	21		
Total	2,650,530	4,073,140	4,627,250	2,402,210	2,117,837	13,122,743	653	2,351	827	2,41		
Bhadrupore Division.												
32. Monghyr	3328,174	653,083	614,773	313,021	301,134	1,832,080	403	617	431	31		
33. Muzaffarpur	3123,447	613,504	684,320	327,731	295,452	1,771,213	343	181	730	31		
34. Ferozepur	3123,447	613,504	684,320	327,731	295,452	1,771,213	343	181	730	31		
35. Muzaffarpur	2300,503	407,002	680,705	360,703	342,891	1,250,487	230	120	02	14		
Total	1,331,070	2,231,397	2,430,590	1,119,083	1,308,835	7,280,784	356	680	617	83		
TOTAL FOR BEHAR ..	3,981,615	6,306,537	6,057,110	3,522,109	3,330,072	20,412,027	402	3,331	1,624	3,25		
ORISSA.												
37. Cuttack	291,430	433,327	632,376	271,073	214,078	1,491,724	420	198	210	1,01		
38. Bhubaneswar	143,432	14,479	15,797	6,883	8,794	49,436	436	...	...	...
39. Balasore	143,432	260,850	290,482	138,692	123,743	750,474	311	8	...	53		
40. Khurda	143,432	260,850	290,482	138,692	123,743	750,474	311	8	...	53		
41. Puri	143,432	260,850	290,482	138,692	123,743	750,474	311	8	...	53		
42. Ganjam	143,432	260,850	290,482	138,692	123,743	750,474	311	8	...	53		
43. Mayurbhanj	143,432	260,850	290,482	138,692	123,743	750,474	311	8	...	53		
44. Jajpur	143,432	260,850	290,482	138,692	123,743	750,474	311	8	...	53		
45. Sambalpur	143,432	260,850	290,482	138,692	123,743	750,474	311	8	...	53		
46. Deogarh	143,432	260,850	290,482	138,692	123,743	750,474	311	8	...	53		
47. Nuapada	143,432	260,850	290,482	138,692	123,743	750,474	311	8	...	53		
48. Boudh	143,432	260,850	290,482	138,692	123,743	750,474	311	8	...	53		
49. Jharsuguda	143,432	260,850	290,482	138,692	123,743	750,474	311	8	...	53		
50. Sambalpur	143,432	260,850	290,482	138,692	123,743	750,474	311	8	...	53		
Total	217,617	1,330,503	1,400,809	613,704	717,079	4,317,909	178	230	271	3,21		
CHOTA NAGPORE.												
Chota Nagpore Division.												
40. Hazaribagh	150,493	233,730	297,530	143,205	117,301	571,875	110	1,367	38	17		
41. Manikpur	214,833	347,012	300,211	143,036	117,301	571,875	103	1,367	38	17		
42. Ranchi	150,493	233,730	297,530	143,205	117,301	571,875	110	1,367	38	17		
43. Jharkhand	150,493	233,730	297,530	143,205	117,301	571,875	110	1,367	38	17		
44. Jharkhand	150,493	233,730	297,530	143,205	117,301	571,875	110	1,367	38	17		
45. Jharkhand	150,493	233,730	297,530	143,205	117,301	571,875	110	1,367	38	17		
46. Jharkhand	150,493	233,730	297,530	143,205	117,301	571,875	110	1,367	38	17		
47. Jharkhand	150,493	233,730	297,530	143,205	117,301	571,875	110	1,367	38	17		
48. Jharkhand	150,493	233,730	297,530	143,205	117,301	571,875	110	1,367	38	17		
49. Jharkhand	150,493	233,730	297,530	143,205	117,301	571,875	110	1,367	38	17		
50. Jharkhand	150,493	233,730	297,530	143,205	117,301	571,875	110	1,367	38	17		
Total	740,080	...	...	...	...	3,831,352	89	1,517	65	1,22
TOTAL FOR CHOTA NAGPORE ..	10,001,510	...	...	...	...	52,703,271	...	51,153	36,173	64,76

POPULATION—concluded.

DIVISION OF POPULATION.					OCCUPATIONS.		Prevailing language.	Emigration or immigration during the year.	REMARKS.
Hindoo.	Mahomedans.	Parsees.	Buddhists and Jains.	Aborigines.	Total adult male agriculturists, including landholders, cultivators, and agricultural labourers.	Male adult non-agriculturists.			
1,367,891	192,988	.....	.....	659	214,769	276,695	Hindustani & Hindi.		
1,729,890	219,832	.....	.....	316	205,930	343,623	Ditto.		
1,500,643	132,671	.....	.....	199	272,784	249,873	Ditto.		
1,598,509	257,160	.....	.....	323	973,767	403,998	Ditto.		
1,916,422	271,445	.....	.....	71			Ditto.		
1,822,048	241,580	.....	1	14	438,038	178,869	Ditto.		
1,240,204	199,237	.....	.....	7	342,968	123,906	Ditto.		
11,001,136	1,514,423	.....	1	1,589	2,498,186	1,576,954			
1,013,546	182,269	.....	34	15,995	285,488	268,495	Hindustani & Hindi.		
1,689,949	189,428	.....	19	16,364	336,891	228,240	Ditto.		
1,022,069	690,140	.....	.....	2,234	281,793	266,776	Hindustani & Bengali.		
356,298	310,890	.....	.....	9,195	131,636	72,113	Bengali.		
650,210	76,786	.....	.....	528,899	210,915	149,650	Sonthali & Bengali.		
5,282,012	1,432,520	.....	53	572,687	1,246,723	984,674			
16,883,148	2,946,943	.....	54	574,276	3,744,909	2,561,628			
1,430,040	40,013	.....	19	22,398	256,777	196,580	Uriya.		
63,205	189	.....	.....	14,680	.....	.....	Ditto & aboriginal dialects.		
46,653	249	.....	.....	2,624	.....	.....	Ditto.		
739,636	11,586	.....	8	17,868	138,546	112,274	Uriya		
738,306	18,878	.....	1	12,427	143,993	88,940	Ditto.		
709,667	3,557	.....	1	382,061	.....	.....	Ditto and aboriginal dialects.		
3,787,727	74,472	.....	29	452,068	.....	.....	
647,991	72,338	.....	.....	49,070	197,625	56,125	Hindi.		
741,952	58,211	.....	.....	24,179	280,219	66,393	Ditto and aboriginal dialects.		
148,554	1,485	.....	.....	167,389	.....	.....	Uriya & ditto.		
827,936	33,622	.....	.....	133,420	177,525	117,908	Bengali & ditto.		
198,445	3,140	.....	.....	297,022	.....	.....	Aboriginal dialects.		
2,564,774	108,796	.....	.....	1,071,980	.....	.....	
39,981,734	19,659,599	267	86,100	2,336,230	.....	.....	

E.-

1.—*Approximate Return of Field Work executed by the Professional Revenue* 1877 to end of

[illegible]

FISCAL.

Survey Parties in the Lower Provinces for season 1877-78 or from 1st October field season, 30th September 1878.

Approximate total area in square miles.	Estimated total cost of all kinds, including contingencies for season 1877-78, from 1st October 1877 to 30th September 1878.	Probable rate per square mile on surveyed area.	REMARKS.
= 1 mile.	Rs. A. P.	Rs. A. P.	
survey.			The establishment left Cuttack for field operations in December 1877, and the several Assistants were able to take up their detached portions and to prosecute their labours by the end of the month. The cadastral operations embraced the whole of zillah Dandimal and Tapang and the northern half of zillah Rameswar. Boundary work only in advance for next season extended over zillahs Panchgarh, Manikagorah, Kaspah, and the southern half of Rameswar. The area that will be completed during the months of April and May has been included and recorded by estimation. It is believed the actual outturn will be larger.
250	1,12,564 0 1	450 4 1	On taking the field the demarcation of the homesteads in the village sites was very defective, and seriously retarded the progress of the survey. Even with the present arrangements the Settlement Officer, in his letter No. 3438, dated the 19th January last, says that he cannot be answerable for the exactness of the work done by his amins. If boundaries that are demarcated by the Settlement Officer are not to be considered authoritative, then the labour and cost of the professional survey must be in vain, and under such circumstances what is the use of measuring boundaries that cannot be final?
advance.			The detail survey has been very carefully checked, the check lines aggregating 515 linear miles.
160	.....	.....	The field books are much improved: they are clear and intelligible, and the work can be replotted at any future time.
			Field operations terminated in May to meet the reduced budget estimate, but it may be remarked that the outturn of work will be ample to keep the recess establishment actively employed during the whole season. Number of fields surveyed, 550,000; average size of fields, 0.31 acres.
			<i>On thakbust maps.</i>
= 1 mile.			There are none.
			<i>On demarcation in the field.</i>
195	61,474 3 11	315 4 0	There is no demarcation establishment to precede the revenue survey. The inquiry as to the boundaries of villages is made by the surveyors of the revenue survey, who are supplied with the 1' = 1 mile map of the old revenue survey as a guide to the villages which are to be separately surveyed.
			Slabs of stone are fixed by the surveyors at the trijunctions of village boundaries.
			<i>On thakbust maps.</i>
= 1 mile.			There are none.
			<i>On demarcations in the field.</i>
143			There is no demarcation establishment to precede the revenue survey. The inquiry as to the boundaries of villages is made by the surveyors of the revenue survey, who are supplied with the 1' = 1 mile map of the old revenue survey as a guide to the villages which are to be separately surveyed.
1 mile, 28	86,813 10 11	607 1 5	Slabs of stone are fixed by the surveyors at the trijunctions of village boundaries.

E.-

1.—*Approximate Return of Field Work executed by the Professional Revenue*
1877 to end of

NAME OF SURVEY DIVISION.	Name of Superintending Officer.	District under survey.	PERGUNNAH.		Number of hulkas or village circuits.	Average size of village circuits in acres.
			Completed.	Partly completed.		
9th Division, or Cut- tack District Irriga- tion Survey.	Captain D. C. Andrew, De- puty Superintendent of Survey. Mr. E. C. Barrett, Assist- ant Superintendent of Survey, in charge from 22nd May.	District Cut- tack.	Kodunda, Sungra, Harihar- pore.	Podumpore, Kisimat Bakrabad, Malkana- gore Snang, Ahti, Khaudhi, Jhankhur, Balubissi, Panidlin, Gandito.	Cadastral	
					168	210
					Boundary survey in	
					516	277
Chota Nagpore Estate Survey.	Captain J. E. Sandeman, Officiating Deputy Super- intendent of Survey.	District Lohar- dugga.	Udepore ... Khukhra or Lodhna ...	...	Scale 16' & 3	
					Chota Nagpo	
					5	560
					Barkagarh Coover	
					81	851
			32" scale ...	{ Interior ...	...	...
			16" & 32" ditto ...	{ Boundary ...	...	...
			4" scale ...	{ ...	...	...
					Total ..	

FISCAL—continued.

Survey Parties in the Lower Provinces for season 1877-78, or from 1st October field season—concluded.

Approximate total area in square miles.	Estimated total cost of all kinds, including contingencies for season 1877-78, from 1st October 1877 to 30th September 1878.	Probable rate per square mile on surveyed area.	REMARKS.
	Rs. A. P.	Rs. A. P.	<p><i>On thakbust maps.</i></p> <p>The thakbust maps have been very hurriedly prepared. In many cases they are altogether at variance with the demarcations. Thakbust plans of no less than 163 villages of circuits Nos. 3, 4, 6, and 7, already surveyed in boundaries, have not been received from the Collector.</p> <p><i>On demarcations in the field.</i></p> <p>The demarcations of boundaries are very defective. The bends and corners of fields are seldom sufficiently marked, and it often happens that owing to <i>dubees</i> being placed at long intervals it is altogether impossible to determine the run of the <i>mehr</i> which constitutes the village boundary.</p> <p>The necessity of constant reference to the demarcation officers has greatly retarded the completion of the survey records.</p> <p>The fixing of stone boundary marks at the triple-junctions of villages is a long way behind the professional boundary survey. The matter has been brought to the notice of the Collector of Cuttack, with a view to the erection of the triple-junction stones being rapidly urged on by him.</p> <p><i>General.</i></p> <p>Field work was started on the 15th January. Difficulties thrown in the way of the survey parties obtaining supplies and coolie labour by zemindars and others have considerably retarded the due progress of the work.</p> <p><i>On thakbust maps.</i></p> <p>Thakbust maps of the estate exist: the distance between triple-junctions agrees in some instances, and is very much out in others. It is not expected that these maps will be of use for passing the boundaries by, but they will be obtained from the Settlement Officer, and a trial made.</p> <p><i>On demarcations in the field.</i></p> <p>The boundary demarcations were completed shortly after the field was taken.</p> <p><i>General.</i></p> <p>All boundaries are left in blue until they have been surveyed by both the muns in adjoining villages, where, after comparison and correction of all discrepancies, they are inked up.</p> <p>* Besides the four square miles surveyed in Chota Naxpore estate, an area of 36 square miles surveyed in 1876-77 has been plotted on 32" scale.</p>
—			
survey.			
63	69,859 8 0	1,108 14 1	
deance.			
223			
= 1 mile.			
Estate.			
4*	10,215 1 4	.....
ment estate.			
108	27,400 0 0	253 11 3	
651			
383			
112	3,08,326 8 3	313 11 9	
28			
1,174			

2.—Statement of Work done by Non-professional Parties from 1st April 1877 to 31st March 1878.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
DIVISION.	District in which demarcation is going on.	Number of villages demarcated.	Estimated area demarcated in square miles.	Number of thakbust maps made over to the surveyor.	Number of boundary disputes decided.	Number of other descriptions of cases disposed of.	Number of duplicate maps prepared.	NUMBER OF REGISTERS COMPLETED.				EXPENDITURE from 1st April 1877 to 31st March 1878.	REMARKS.	
								ENGLISH.		VERNACTULAR.				
								Village.	ESTATE.	Village.	ESTATE.			
Midnapore ...	Midnapore ...				2	1,066	168					Rs. 20,530		No average of the cost per square mile can be struck, as no new ground was taken up.
Burdwan ...	Hooghly and Burdwan.				3	2,857	3,532	25	21	55	33	17,443		
Orissa ...	Pooree ...	496		No thakbust maps, but 7 <i>maj-milhis</i> and lists of 148 <i>mouzas</i> have been made over to the survey party.	40	160						64,523*		* On account of survey and settlement.

E.—FISCAL—continued.

5.—Statement of Land Revenue, Demand, Collections, Remissions, and Net Balances for 1877-78.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	
DIVISIONS.	DEMAND.			COLLECTIONS.						REMISSIONS.	NET BALANCES.			Payments in advance.
	Current.	Arrear.	Total.	Credited to Land Revenue.	Credited to Estates' Improvement Fund.	Credited to Land Revenue.	Credited to Estates' Improvement Fund.	Total.	Current.		Arrear.	Total.		
				Current.	Current.	Arrear.	Arrear.							
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Burdwan	78,27,567	3,35,008	80,52,635	77,16,304	7,537	1,47,972	2,760	78,74,582	4,702	1,02,630	70,881	1,73,061	75,857	
Presidency	51,73,266	3,91,621	55,68,747	48,89,356	3,343	2,37,361	1,006	51,92,526	21,621	2,77,143	75,457	3,52,000	81,356	
Rajshahye and Cooch Behar ...	47,91,637	1,99,533	49,91,490	46,60,243	10,645	1,34,671	602	48,36,461	8,208	1,20,016	41,805	1,61,821	62,549	
Dacca	42,35,330	3,95,307	46,33,646	38,31,119	8,025	2,57,767	4,023	40,91,564	2,005	4,55,337	1,44,430	5,99,937	1,60,234	
Chittagong	13,35,455	3,34,356	16,55,001	9,23,757	3,194	1,84,739	2,363	11,14,430	1,905	3,96,153	1,45,510	5,41,003	23,470	
Patna	81,10,576	1,45,106	83,05,732	79,84,084	5,892	1,78,646	1,387	81,70,060	15,145	1,11,992	8,636	1,20,628	3,51,362	
Bhagulpore	82,57,131	2,47,131	85,24,312	81,76,055	5,278	2,22,822	2,064	84,07,117	13,665	75,900	27,730	1,03,530	1,19,905	
Orissa	17,50,336	31,201	17,81,537	17,45,311	3,700	13,257	210	17,24,548	20,114	23,751	8,154	36,905	2,36,162	
Chota Nagpore	3,64,739	30,125	3,94,864	3,36,210	4,562	25,716	738	3,64,226	1,301	20,163	58	20,241	2,749	
Total ...	3,68,95,967	20,73,191	3,89,69,158	3,52,17,000	53,181	14,73,011	16,892	3,67,65,003	84,066	15,57,245	5,22,101	21,19,490	11,43,304	

[1877-78.]

STATISTICAL RETURNS.

XVII

E.—FISCAL—concluded.

6.—Land Revenue.

1	2	3	4	5	6	7	8	9	10	11
DESCRIPTION OF REVENUE.	REVENUE FOR 1876-77.		REVENUE FOR 1877-78.		Cost of collections.	Net collections during the year.	Net outstanding balances.	Number of sales for arrears of revenue.	Revenue of estates sold.	Cause of increase or decrease of revenue, with explanation of any items realized in addition to the annual assessed revenue.
	Assessed.	Realized.	Assessed.	Realized.						
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
From settled estates bearing revenue in past year	3,43,76,162	3,46,57,207	3,51,05,597	3,50,16,061	3,30,16,061	(a) 14,30,230	The increase in the revenue of 1877-78 is owing to re-settlement of estates, enhancement of revenue in estates settled on progressive jummas, and fresh settlement of newly reclaimed lands.
From settled estates added to revenue roll during present year ...	2,43,566	1,98,360	73,772	55,650	.....	55,650	(a) 5,219	.....	.....
From settled estates taken off revenue roll during present year ...	84,219	.....	1,04,734	.....	.....	.....	.....	.....	.....
Collections from Government estates ...	16,91,332	16,34,066	18,16,362	16,34,502	53,821	16,35,681	(a) 6,33,978	.....	.....
Income from sale of Government estates ...	.....	5,684	.....	38,211	.....	.....	.....	.....	.....
Miscellaneous land revenue not included in above ...	.....	1,43,217	.....	(b) 1,75,066	.....	.....	53,763	.....	.....
Total ...	3,67,27,341	3,66,73,634	3,69,95,967	3,69,78,943	53,821	3,67,06,845	22,63,204	907	1,57,188	

(a) These amounts will not correctly result from subtracting the figures of column 5 from column 4 owing to arrear collections (Rs. 14,94,773) having been included in column 5, while the arrear balances have not been taken into account in column 4, while both arrear balances and arrear collections are taken into account in column 8. There is also a further difference *per contra* of Rs. 84,066 on account of remission.

(b) The figures under this head do not include forest revenue.

PART II.

STATISTICS OF PROTECTION.

A.—LEGISLATIVE.

1.—Statement of Acts passed by the Legislature of the Province of Bengal in 1877-78, and sanctioned as required by law.

Title of Act.	By whom proposed.	Object and character of Act.	Date on which sanctioned.	
<i>Act I of 1878.</i>				
An Act for the licensing of trades, dealings, and industries within the territories subject to the Lieutenant-Governor of Bengal.	Hon'ble Mr. Mackenzie	To raise money to meet expenditure on the relief and prevention of famine in British India by imposing a license tax on trades, dealings, and industries in Bengal.	Lieutenant-Governor's assent February 1878.	14th
			Governor-General's assent February 1878.	24th
<i>Act II of 1878.</i>				
An Act to extend the provisions of Bengal Act VII of 1873 (The Labour Districts' Emigration Act) to the district of Chittagong and to the Chittagong Hill Tracts.	Ditto	To extend the Labor Districts' Emigration Act to the province of Chittagong.	Lieutenant-Governor's assent February 1878.	5th
			Governor-General's assent February 1878.	25th
<i>Act III of 1878.</i>				
An Act to define and limit the powers of settlement officers with respect to enhancement of rent.	Hon'ble Mr. Reynolds	To define and limit the powers of settlement officers by enacting that rent is to be enhanced in settlement proceedings only on the grounds now sanctioned by the rent law, the rent to be deemed to be correctly enhanced until the contrary is proved, and the ryot to be bound to contest his liability to pay the enhanced rent within three months.	Lieutenant-Governor's assent February 1878.	25th
			Governor-General's assent March 1878.	26th

A.—LEGISLATIVE—concluded.

3.—Statement of Bills proposed or pending in the Legislature of the Province of Bengal in 1877-78.

TITLE OF BILL.	By whom proposed.	Object and character of Bill	When introduced.	If pending, way, and in what state.
Bill to amend the procedure in suits between landlords and tenants in Chota Nagpore.	Hon'ble Mr. Reynolds	To amend the law relating to rent in the province of Chota Nagpore by suiting it to the requirements and exigencies of that province.	4th November 1876	Assented to by the Lieutenant-Governor on the 14th March 1878. Assent of the Governor-General withheld pending the passing of the Civil Procedure Code Amendment Bill.
Bill to consolidate and amend the law relating to the excise revenue in the presidency of Fort William in Bengal.	Ditto	To amend and consolidate the laws relating to the manufacture, sale, and possession of spirituous and fermented liquors and intoxicating drugs, and to the collection of the revenue derived therefrom.	2nd February 1878	Received the Lieutenant-Governor's assent 1st May 1878, and the Governor-General's assent 3rd July 1878, and published as Act No. VII of 1878.
Bill for the regulation of the rural police in the districts of Hazareebagh and Lohardugga.	Hon'ble Mr. O'Kinealy	To regulate the rural police in the districts of Hazareebagh and Lohardugga by adopting, with certain modifications, the provisions of the Village Chowkeedare Act, 1870.	16th March 1878.	Received the Lieutenant-Governor's assent 10th April 1878, and the Governor-General's assent 13th June 1878, and published as Act No. VIII of 1878.
Bill to provide for the cleansing and construction of latrines in first class Municipalities.	Hon'ble Mr. Mackenzie	To empower first class municipalities to levy a fee on holdings on a rate per head and apply the proceeds to the maintenance of an establishment for cleansing public and private latrines, and to the construction of public latrines.	23rd March 1878	Received the Lieutenant-Governor's assent 10th April 1878, and the Governor-General's assent 20th June 1878, and published as Act No. VI of 1878.
Bill to amend Bengal Act V of 1866	Hon'ble Mr. Reynolds	To empower the Local Government to allow the Corporation of Calcutta to appoint the registering officer of hackney carriages.	30th March 1878.	Received the Lieutenant-Governor's assent 10th April 1878, and the Governor-General's assent 4th May 1878, and published as Act No. IV of 1878.
Bill to amend Bengal Act VII of 1873	Ditto	To restrict the powers of the Collector under section 55 of the Land Registration Act, 1876.	30th March 1878	Received the Lieutenant-Governor's assent 10th April 1878, and the Governor-General's assent 16th May 1878, and published as Act No. V of 1878.
Bill to amend the law relating to the Court of Wards within the provinces subject to the Lieutenant-Governor of Bengal.	Ditto	To amend the law relating to the Court of Wards	16th March 1878	Read in Council and referred to a Select Committee.
Bill to provide for the settlement of the rent of lands on the application of landholders or ryots.	Hon'ble Baboo Kristo-das Pal	To provide for the settlement of the rent of lands by Government officers on the application of landholders or ryots, the rent to remain fixed for ten years, and enhancement to be made and contested as provided in Bengal Act III of 1873.	23rd March 1878	Read in Council and referred to a Select Committee.

B.—JUDICIAL STATEMENTS.

2.—(Criminal).—Statement of offences reported, and of persons tried, convicted, and acquitted for each offence in the year 1877.

1	2	3	4	5	6	7	8	9
DESCRIPTION OF OFFENCES.	Sections of Penal Code applicable.	Number of offences reported during the year.	Number of persons under trial during the year.	Acquitted or discharged.	Convicted.	Died, escaped, or transferred.	Remaining under trial.	REMARKS. (The number committed out of those remaining under trial has been noted in this column.)
3 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,082	3,173	1,111	1,872	0	184
4 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,338	5,209	1,682	3,276	18	333
5 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	187	697	87	580	...	...
6 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	110	114	37	75	...	...
7 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,104	7,001	2,326	4,675	...	...
8 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,082	3,173	1,111	1,872	0	184
9 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,338	5,209	1,682	3,276	18	333
10 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	187	697	87	580	...	...
11 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	110	114	37	75	...	...
12 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,104	7,001	2,326	4,675	...	...
13 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,082	3,173	1,111	1,872	0	184
14 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,338	5,209	1,682	3,276	18	333
15 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	187	697	87	580	...	...
16 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	110	114	37	75	...	...
17 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,104	7,001	2,326	4,675	...	...
18 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,082	3,173	1,111	1,872	0	184
19 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,338	5,209	1,682	3,276	18	333
20 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	187	697	87	580	...	...
21 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	110	114	37	75	...	...
22 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,104	7,001	2,326	4,675	...	...
23 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,082	3,173	1,111	1,872	0	184
24 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,338	5,209	1,682	3,276	18	333
25 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	187	697	87	580	...	...
26 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	110	114	37	75	...	...
27 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,104	7,001	2,326	4,675	...	...
28 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,082	3,173	1,111	1,872	0	184
29 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,338	5,209	1,682	3,276	18	333
30 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	187	697	87	580	...	...
31 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	110	114	37	75	...	...
32 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,104	7,001	2,326	4,675	...	...
33 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,082	3,173	1,111	1,872	0	184
34 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	1,338	5,209	1,682	3,276	18	333
35 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	187	697	87	580	...	...
36 OFFENCES AGAINST PUBLIC TRAMWAYS.	UNLAWFUL ASSAULT BY RIDING, &c. ...	143 to 145, 147 to 151, 152 to 156, 157 to 162	110	114	37	75	...	...

B.—JUDICIAL STATEMENTS—continued.

2.—(Criminal).—Statement of offences reported, and of persons tried, convicted, and acquitted for each offence in the year 1877—continued.

1	2	3	4	5	6	7	8	9
DESCRIPTION OF OFFENCES.	Sections of Penal Code applicable.	Number of offences reported during the year.	Number of persons under trial during the year.	Acquitted or discharged.	Convicted.	Died, escaped, or transferred.	Remaining under trial.	REMARKS. (The number committed out of those remaining under trial has been noted in this column.)
37 Forced labour	317	5	9	7	2	...	18	7
38 Begging	318	183	227	152	57	...	...	...
39 Unnatural offence	377	1	1	1	...	...	...	...
40 Theft	382	10	21	10	20	...	...	3
41 Attempt	370 to 381	27,105	23,506	6,340	19,105	36	1,025	24
42 Extortion	380 to 389	202	62	38	...	...	...	...
43 Robbery	384 and 485	147	870	530	266	4	61	1
44 Robbery	394	21	54	20	32	1	...	...
45 Dacoity	392	179	200	101	84	...	15	1
46 Dacoity	397	2	17	13	10	1	...	...
47 Dacoity	397	133	540	287	179	4	70	23
48 Criminal misappropriation of property	395, 399, 400	1,115	891	408	462	...	26	...
49 Criminal breach of trust	401 to 404	2,209	1,577	1,005	574	...	85	...
50 Receiving of stolen goods	411 to 414	2,206	3,501	1,402	2,479	10	152	7
51 Receiving of stolen goods	417 to 420	1,258	834	581	211	...	32	...
52 Receiving of stolen goods	421 to 424	12	12	10	2	...	...	...
53 Receiving of stolen goods	425 to 428	823	839	401	319	3	56	6
54 Receiving of stolen goods	429 to 432	7	5	2,707	1,804	6	107	1
55 Receiving of stolen goods	433	7	11	11	...	...	...	...
56 Receiving of stolen goods	434	30	45	26	20	...	8	5
57 Receiving of stolen goods	435 and 436	13,313	3,256	1,132	2,004	7	113	1
58 Receiving of stolen goods	437, 438, 439	2,407	45	10	30	...	318	...
59 Receiving of stolen goods	440	2,103	8,031	4,452	4,117	24	...	...
60 Receiving of stolen goods	441	142	...	...	...	...	...	...
61 Receiving of stolen goods	442	145	7	258	7	...	54	1
62 Receiving of stolen goods	443 to 471	145	307	...	48	...	...	...
63 Receiving of stolen goods	472 to 475	8	15	4	8	...	3	...
64 Receiving of stolen goods	476 to 478	10	14	11	3	...	...	...
65 Receiving of stolen goods	479	2	3	3	...	...	...	...
66 Receiving of stolen goods	480	2	...	...	...	...	...	...
67 Receiving of stolen goods	481	2	...	...	...	...	...	...
68 Receiving of stolen goods	482	2	...	...	...	...	...	...
69 Receiving of stolen goods	483	2	...	...	...	...	...	...
70 Receiving of stolen goods	484	2	...	...	...	...	...	...
71 Receiving of stolen goods	485	2	...	...	...	...	...	...
72 Receiving of stolen goods	486	2	...	...	...	...	...	...
73 Receiving of stolen goods	487	2	...	...	...	...	...	...
74 Receiving of stolen goods	488	2	...	...	...	...	...	...

B.—JUDICIAL STATEMENTS—continued.

2.—(Criminal).—Statement of offences reported, and of persons tried, convicted, and acquitted for each offence in the year 1877—concluded.

1	2	3	4	5	6	7	8	9
DESCRIPTION OF OFFENCES.	Sections of Penal Code applicable.	Number of offences reported during the year.	Number of persons under trial during the year.	Acquitted or discharged.	Convicted.	Died, escaped, or transferred.	Remaining under trial.	REMARKS. (The number committed out of those remaining under trial has been noted in this column.)
63 Counterfeiting or making or possessing a die, plate, or instrument for counterfeiting a trade or property mark.	483 to 485	5	9	6	3	...	...	.....
64 Removing, destroying, &c., a trade or property mark with intent to cause injury.	489	1	1	1	...	...	...	.....
65 Criminal breach of contract of service	490 to 492	82	102	30	72	...	...	.....
66 Offences relating to marriage ...	493 to 494	2,775	1,792	1,358	338	10	86	13
67 Defamation ...	500 to 502	551	352	235	116	...	8	.....
68 } Criminal inti- (Resulting in mulation, in- death or other sult, or annoy- grievous hurt, ance. Other cases ...	506	112	110	52	58	...	...	.....
69 } ...	501 to 510	711	511	250	250	1	4	.....
70 Other offences not included in the foregoing specifications.	.....	36,281	45,093	8,591	36,048	47	407	1
Total ...	.....	177,048	163,290	59,512	98,694	310	4,774	334

B.—JUDICIAL STATEMENTS—continued.

XXIV

3.—(Criminal).—Statement showing the General Result of Criminal Trials in the Tribunals of various classes in the year 1877.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CLASS OF TRIBUNALS.	Remaining at end of last year.	NUMBER OF PERSONS DEALT WITH.					PERSONS DISPOSED OF.					Died, escaped, or transferred.	Remaining at end of year.	Average number of days during which each case lasted.	Number of witnesses who attended.
		Under arrest by police.	Upon warrant.	On summons.	Voluntarily.	Received by transfer.	Total.	Discharged without trial.	Acquitted.	Convicted.	Committed or referred.				
Unpaid Magistrates	98	1,306	198	8,374	650	10,732	803	2,022	7,728	10	3	81	6	24,304	
Benches of Magistrates	100	2,574	401	6,049	100	9,324	844	2,227	6,241	1	1	110	4	16,870	
Local and subordinate paid Magistrates	2,183	34,718	5,362	36,628	2,253	81,401	11,829	19,400	40,056	1,482	165	2,552	11	210,308	
Full-power Magistrates (exercising jurisdiction throughout the district).	1,709	29,589	2,901	21,018	932	55,357	8,361	10,576	33,583	1,241	93	1,508	9	132,021	
Chief Magistrates of district (District Magistrate)	139	2,775	290	1,500	258	5,210	630	888	3,370	165	27	99	7	8,154	
Total Magistracy	4,329	70,909	9,008	74,059	4,202	162,914	22,948	35,474	98,984	2,879	289	4,440	...	388,157	
Sessions Courts	329	.....	7	.....	2,579	3,255	11	1,179	1,710	.....	21	334	41	12,683
High Court { Ordinary original jurisdiction	2	100	.....	.....	.....	102	3	16	81	.....	1	1	.....	540
High Court { Referred jurisdiction	4	.....	.....	.....	72	76	.....	9	61	.....	.....	6	.....	.....
GRAND TOTAL	4,904	71,039	9,105	74,059	4,202	2,088	166,247	22,862	99,673	28,350	2,879	311	4,781	...	406,580

BENGAL ADMINISTRATION REPORT.

[1877-78.]

B.—JUDICIAL STATEMENTS—*continued.*

-(*Criminal*).—*Statement showing the punishments inflicted by the various Criminal
Tribunals in the year 1877.*

CLASS OF TRIBUNALS.

CLASS OF TRIUNALS.	PERSONS SENTENCED TO						PERSONS ORDERED TO FIND OR GIVE							
	Death.	Terms— months or years.		Penal servitude.	Imprisonment & Reformatory.		Forfeiture of property.	Fines.		Whipping.		Surety of the peace.	Recognizance.	Sureties for good behavior.
		For life.	For a term.		With solitary confinement.	Without solitary confinement.		Simple.	With imprisonment.	Without imprisonment.	In addition to other punishment.				In lieu of other punishment.
Bench of Magistrates .. ..	..	..	..	620	34	..	98	5,487	8	601	..	..	5,236	7,015
Unpaid Magistrates .. ..	..	..	..	230	34	..	30	7,302	1	13	..	..	..	..
Local and Subordinate paid Magistrates.	..	..	..	33,13,100	585	..	2,003	28,808	126	1,319	803	1,110	602	27,527
Full-power Magistrates (Grant exclusive jurisdiction throughout the District).	..	..	..	27	8,465	303	17-07	20,078	108	1,010	503	661	1,010	17,031
District Magistrates of Towns (District Magistrate).	..	..	..	3	810	50	..	1,773	25	117	51	105	342	1,500
Total Magistracy .. ..	..	..	..	63,215,000	1,060	..	4,133	65,205	280	2,505	1,452	2,304	2,002	27,020
Sessions Courts	81	130	133	..	10	..	123	8	4	10	..	..	1	32
High Court, Ordinary Original Jurisdiction.	1	5	..	..	1	..	3	..	..	..	..	..	..	..
GRAND TOTAL	82	131	134	..	64	21,875	1,080	4,570	63,613	290	2,605	1,452	2,304	2,003

A-13. - This statement does not include the following convicted persons convicted of terrorism convictions:

Following conviction	Persons convicted
243	22
73	22
2	4011

B.—JUDICIAL STATEMENTS—continued.

5.—(Criminal).—Statement showing the result of Appeal and Revision in Criminal Cases during the year 1877. -

TRIBUNAL.	Number of appellants or persons applying for revision under Section 426, Code of Criminal Procedure.	NUMBER OF PERSONS.							
		Appeals or applications rejected.	Sentences confirmed.	Sentences modified.	Sentences reversed.	Proceedings quashed.	Further inquiry or evidence ordered.	Cases referred for revision to High Court.	Pending.
1	2	3	4	5	6	7	8	9	10
Chief Magistrates ...	4,036	665	1,689	546	762	62	104	45	163
Sessions Courts ...	6,137	1,453	2,512	468	913	15	58	309	409
Total, ...	10,173	2,118	4,201	1,014*	1,675	77	162	354	572
High Court ...	2,428	219	1,236	127	691	30	.....	.....	125
GRAND TOTAL ...	12,601	2,337	5,437	1,141	2,366	107	162	354	697

Inclusive of 35 persons on whom sentences were enhanced.

B.—JUDICIAL STATEMENTS—*continued.*

6.—(Civil).—*Statement shewing the number and description of Civil Suits instituted in the Civil Courts of the Lower Provinces in the year 1877.*

B.—JUDICIAL S.

6.—(Civil).—Statement showing the number and description of Civil S.

SUITS FOR MONEY, DISTINGUISHING SUITS UP TO RS. 500 COGNIZABLE BY SMALL CAUSE COURTS FROM OTHER CASES

CLASS OF TRIBUNALS.	On written obligation.		On un-written.		On account stated.		Money had and received.		Goods sold.		Breach of contract not mentioned above.		Rent not falling under the rent law.		Movable property or value thereof.		Damages.
	Rs. 500 and under.	Above Rs. 500.	Rs. 500 and under.	Above Rs. 500.	Rs. 500 and under.	Above Rs. 500.	Rs. 500 and under.	Above Rs. 500.	Rs. 500 and under.	Above Rs. 500.	Rs. 500 and under.	Above Rs. 500.	Rs. 500 and under.	Above Rs. 500.	Rs. 500 and under.	Above Rs. 500.	
Small Cause Courts.	27,404	...	6,378	...	1,268	...	875	...	5,701	...	1,496	...	2,700	...	954	...	2,667
Paid Sub-divisional Tribunals (Moon-siffs' Courts).	96,263	2,295	7,427	101	7,241	166	3,150	102	2,802	46	2,208	39	1,620	19	6,274	68	3,378
District Courts other than Chief Courts of Districts (Subordinate Judges' Courts).	453	959	15	81	81	72	47	68	...	15	1	20	...	19	59	35	1
Chief Courts of Districts (District Judges' Courts).	.....	26	...	1	...	2	...	...	...	...	...	...	...	...	...	1	1
Revenue Courts	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	1,24,126	3,280	13,820	196	8,593	240	4,072	170	8,503	61	3,705	59	4,220	38	7,287	104	6,047

NT's—*continued.*

...stituted in the Civil Courts of the Lower Provinces in the year 1877.

[illegible]

B.—JUDICIAL STATEMENTS—continued.

7.—(Civil).—Statement showing value of Suits disposed of in the Civil and R Courts of the Lower Provinces in the year 1877.

VALUE OF SUITS.	NUMBER OF SUITS DISPOSED OF IN DIFFERENT COURTS.						REMARKS
	Village Courts.	Small Cause Courts.	Moonsifs', Deputy Collectors', and other Sub-divisional Courts.	District Courts.	Superior Courts.	Total number of suits disposed of in different Courts.	Total value of suits.
<i>In Civil Courts.</i>							
Rs.							Rs.
Not exceeding	...	3,023	30,880	24	...	34,651	1,09,374
Ditto	...	18,084	90,002	258	...	100,244	14,65,011
Ditto	...	23,703	187,623	421	...	163,807	70,41,035
Ditto	...	5,104	30,303	67	...	41,804	81,19,640
Ditto	4,775	70	...	4,845	31,01,315
Ditto	12	3,417	...	3,420	67,33,743
Ditto	1	410	...	420	20,31,435
Ditto	316	...	316	73,60,370
Exceeding	26	...	26	51,00,326
Total	...	49,874	500,506	6,062	...	355,442	4,60,32,593
<i>In Revenue Courts.</i>							
Rs.							
Not exceeding	1,280	210	...	1,490	10,621
Ditto	2,671	287	...	2,958	31,036
Ditto	2,007	172	...	2,179	94,490
Ditto	462	40	...	442	80,023
Ditto	52	4	...	56	42,011
Ditto	39	2	...	41	70,500
Ditto
Ditto	1	...	...	1	14,306
Exceeding
Total in Revenue Courts	6,355	715	...	7,070	3,54,507
GRAND TOTAL	...	49,874	506,861	6,777	...	362,512	4,72,77,100

B.—JUDICIAL STATEMENTS—*continued.*

8.—(Civil).—*Statement showing the General Result of the Trial of Civil Suits in the Courts of Original Jurisdiction in the Lower Provinces in the year 1877.*

B.—JUDICIAL.

8.—(Civil).—Statement showing the General Result of the Trial of Civil Suits

CLASS OF COURTS.	1 Suits remaining from last year.	2 Instituted in 1877.	3 Received by transfer.	4 Total for disposal.	5 Transferred to other Courts.	6 Plaint rejected or returned.	7 Dismissed for default.	8 Withdrawn with leave.	9 Compromised.
<i>Civil Courts.</i>									
Small Cause Courts	2,552	49,443	268	52,263	4	94	6,914	1,202	6,371
Paid sub-divisional tribunals (Moonsifs' Courts)	36,385	295,182	23,065	354,632	18,500	730	24,906	6,235	31,713
District Courts other than Chief Courts of Districts (Subordinate Judges' Courts)	1,386	4,602	665	6,647	406	17	202	42	404
Chief Courts of Districts (District Judges' Courts)	92	101	90	283	39	...	1	3	25
Superior Courts of General Jurisdiction. (High Court, Original Side.)	669	721	1	1,391	.....	...	51	161	9
Superior Courts of Special Jurisdiction. { Admiralty	2	8	.....	10	.....	...	.....	...	.....
{ Insolvent	184	76	.....	260	.....	...	12	4	.....
{ Divorce	6	2	.....	8	.....	...	.....	1	.....
Total	* 11,270	359,138	24,089	415,197	18,949	841	32,119	7,718	38,522
<i>Revenue Courts.</i>									
Paid sub-divisional tribunals	867	3,916	3,917	7,830	11	2	1,227	103	899
Courts of Collectors	245	3,671	.....	3,916	3,030	...	187	23	53
Total	1,112	7,587	3,917	11,746	3,047	2	1,414	126	952
GRAND TOTAL	42,382	357,725	27,136	427,213	21,996	843	33,533	7,844	39,074

STATEMENTS—continued.

in the Courts of Original Jurisdiction in the Lower Provinces in the year 1877.

10	11	12	13	14	15	16	17	18	19	20	21	REMARKS.
Decreed on confession.	Decreed <i>ex parte</i> .	Dismissed <i>ex parte</i> .	Judgment for plaintiff whole or part.	Judgment for defendant.	Total disposed of, omitting transfers.	Pending.	Over two months.	Over four months.	Contested.	Uncontested.	Referred to arbitration.	
11,414	13,266	286	7,116	3,101	40,871	2,387	1	2	...	...	100	IN 150 CASES PLAINTIFFS WERE REJECTED WITH- OUT REGISTRATION.
38,208	101,498	16,669	67,107	23,320	300,606	35,477	6,524	6,279	...	...	900	
442	1,521	21	1,032	682	4,866	1,365	360	526	...	...	121	
11	0	1	81	62	100	48	11	23	...	...	...
71	103	...	130	46	508	706	728	651	...	...	11	
...	...	...	...	...	...	10	2	8	...	...	...
...	...	...	...	...	18	100	...	...	...	...	...
...	1	...	...	1	5	5	...	5	...	...	...
50,146	116,471	16,477	66,066	27,106	356,669	40,285	7,626	7,400	...	...	1,287	THE DIFFERENCE OF NUMBER OF CASES BETWEEN THE DISTRICT AND THE JUDICIAL MAGISTRATES FOR REGISTRATION OF MORTGAGES.
667	1,329	33	1,030	645	6,355	1,461	312	247	...	...	...
73	124	...	100	93	715	107	2	2	...	...	...
642	1,463	38	2,110	734	7,070	1,620	314	249	...	...	...
50,788	117,084	17,010	68,176	27,667	368,120	41,911	7,940	7,745	...	...	1,287	

B.—JUDICIAL STATEMENTS—continued.

9.—(Civil).—Statement showing the Business of the Civil and Revenue Appellate Courts in the Lower Provinces in the year 1877.

CLASS OF COURTS.	Remaining.	Instituted.	Received by transfer.	Total.	Transferred.	Dismissed for default of under sections 5 and 6 of Act XXIII of 1861.	HEARD <i>ex parte</i> .			CONTESTED.				Total disposed of.	Pending.	Over four months.	Objecting under section 348, Act VIII of 1869.	Objections allowed.
							Confirmed.	Modified.	Reversed.	Confirmed.	Modified.	Reversed.	Remanded.					
Civil Appellate Courts other than Chief Court* of District.	2,021	112	7,652	9,655	755	302	84	10	44	4,076	492	1,405	216	6,029	2,271	1,535	241	79
(Revenue Appeals)	754	.....	4,580	5,614	142	141	118	18	45	2,354	621	722	202	4,219	953	556	89	42
Collectors' Appellate Courts ...	71	460	.....	531	.....	18	24	...	8	275	30	62	35	443	88	29	...	...
Chief Appellate Courts of Districts.	4,214	10,548	1,020	15,782	7,477	299	89	...	32	2,779	229	832	105	4,395	3,946	1,892	147	39
(District Judges' Courts.)	2,561	9,487	447	12,495	4,663	172	88	7	12	2,292	559	741	529	4,410	3,892	1,351	88	25
Chief Court of Province. (High Court.)	7	35	.....	45	.....	4	3	...	...	13	...	1	2	23	22	9	...	...
(Regular Appeals from Judge or Bench in Original Jurisdiction.	491	330	.....	821	.....	37	...	...	...	143	24	45	85	284	537	...	...	...
(Ditto from District Courts.*	3,301	2,477	.....	5,778	.....	139	...	...	...	2,673	72	224	417	3,539	2,192	...	...	...
(Special Appeals* ...)																		
Total ...	13,829	23,452	13,285	50,567	13,867	1,103	406	35	119	14,005	2,067	4,102	1,532	23,689	13,401	5,372	575	158

B.—JUDICIAL STATEMENTS—continued.

10.—(Civil).—Statement showing the Execution of the Decrees of the Civil and Revenue Courts in the Lower Provinces in the year 1877.

CLASS OF COURTS.	APPLICATIONS TO EXECUTE DECREES.				Decrees completely executed.	Decrees partially executed.	Pending at the end of 1877.	Decrees executed by possession being given.	Imprisonment of persons.	NATURE AND NUMBER OF CORRECTIVE PROCESSES ISSUED.				REMARKS.
	Pending.	Filed.	Received by transference.	Total.						MOVABLE PROPERTY.		IMMOVABLE PROPERTY.		
										Attached.	Sold.	Attached.	Sold.	
Small Cause Courts	2,576	31,380	10	34,426	5,105	26,754	2,217	.....	564	6,016	2,494	161	.....	.....
Paid Sub-Divisional Tribunals (Moonsiffs' Courts)	49,550	210,380	10,547	270,477	63,391	115,990	51,339	7,242	3,300	35,612	12,746	64,573	21,932	109
District Courts other than Chief Courts of District (Subordinate Judges' Courts)	2,639	9,547	527	13,013	2,511	7,464	3,005	336	137	919	384	3,925	1,499	65
Chief Courts of Districts (District Judges' Courts)	459	1,119	619	2,227	557	720	522	58	21	167	55	451	250	4
Revenue Courts	1,633	3,327	51	4,911	1,257	2,304	789	74	14	893	434	945	235	21
Total	56,357	256,453	11,734	324,404	73,324	182,410	57,775	7,710	3,930	43,656	15,993	69,556	23,914	199

B.—JUDICIAL STATEMENTS—continued.

11.—Statement showing use of Jurors and Assessors in the Civil and Criminal Courts during the year 1877.

Class of Courts in which Jurors or Assessors are employed, distinguishing Criminal from Civil Courts.	Established or average number of Jury or Assessors in each case, and prescribed qualification.	Number of cases tried by Jury.	Number of cases with Assessors.	JURY TRIALS.		ASSESSORS' TRIALS.		Notes showing in what classes of cases Jurors and Assessors have been principally employed.	REMARKS.
				Cases in which the Judge approved of the Verdict.	Cases in which the Judge did not approve of the Verdict.	Number of cases in which the Jurors were not used.	Number of cases in which the Assessors were not used.		
Courts of Session (Criminal).	Number of Jurors 3, 5, 7, or 9. Number of Assessors 2 or more. Qualifications as described in sections 404, 405, and 406, Code of Criminal Procedure.	342	1,087	255	57	845*	134*	All offences, including abetments and attempts, falling under chapters VIII, XI, XVI, XVII, and XVIII of the Indian Penal Code, are tried by Jury; the rest are tried with the aid of Assessors.	*Not including cases which were disposed of without the opinion of Assessors, and also those in which the Courts partly concurred and partly differed with the Assessors.
High Court, Ordinary Original Jurisdiction (Criminal).	The established number of Jurors is 9. For qualification, see sections 2 and 3 of the Jury Rules.	20 cases were tried by Jury, 3 cases were certified as unsustainable under section 14, Act X of 1875. In 19 cases the prisoners pleaded guilty. 1 remaining at the end of the year 1877. 1 escaped.	94 Total number of cases.					Juries were employed in criminal trials only.	

B.—JUDICIAL STATEMENTS—*continued.*

-Statement of Business disposed of in the High Court of Judicature at Fort William in Bengal in the year 1877.

(APPELLATE SIDE.)

	Remaining from 1876.	Filed in 1877.	Disposed of in 1877.	Remaining at close of 1877.	DAYS OF SITTINGS, WITH NUMBER OF JUDGES.			
					Days.	Barrister Judges.	Civilian Judges.	Other Judges.
I.—Regular appeals	498	343	294	547				
References to the full bench ... ..	...	1	1	.....			
Appeals to court at large under section 15 of the letters patent ... ..	...	1	.....	1				
II.—Special appeals	3,374	2,658	3,731	2,301	2	5	6	1
References to the full bench	1	7	8	...	1	5	6	1
Appeals to court at large under section 15 of the letters patent	73	144	153	64	6	4	5	1
Reviews	1	5	4	...	1	4	4	1
III.—Miscellaneous appeals { Regular	143	259	254	147	43	3	6	1
{ Special	80	104	135	49	2	3	6	1
References to the full bench	1	1	2	.....	31	3	5	1
Appeals to court at large under section 15 of the letters patent ... ..	.....	.....	.....	.....	13	3	4	1
Reviews	2	1	3	.....	2	3	3	1
IV.—References under Mofussil Small Cause Court Act	2	11	10	3	17	3	6	1
V.—Divorce cases	1	3	1	3	3	3	5	1
I.—{ Appeals } From British Burma {	.....	2	.....	2	12	1	4	1
{ References } ... ..	.....	.....	.....	.....	1	1	3	1
I.—Criminal cases	107	1,107	1,135	75	1	1	1	1
I.—Miscellaneous orders in court	223	2,168	2,200	191	1	1	1	1
X.—Miscellaneous orders out of court ..	.....	531	531	.....	1	1	1	1
Total ...	4,305	7,345	8,465	3,385				

* These figure indicate the number of orders passed out of court on review of periodical returns (civil and criminal) and sessions statements, but do not include the orders passed on letters and references in the Administrative Tribunal, which are extremely numerous and important, occupying much of the time of one of the Judges, and of them being further considered by a committee.

B.—JUDICIAL.

12A.—General Statement of Deeds registered in the

	1	2	3	4	5	6	7	8	9	10
		REGISTRATIONS AFFECTING								
		COMPULSORY.								
Number.	DISTRICTS.	Number of registration offices.	Instruments of gift (section 17, clause a).	Instruments of sale of the value of Rs. 100 and upwards.	Instruments of mortgage of the value of Rs. 100 and upwards.	Other instruments registered under section 17, clauses b and c.	Perpetual leases (section 17, clause d).	All leases (other than perpetual leases) which have been compulsorily registered under section 17, clause d.	Total compulsory registrations.	Ordinary fees paid for the same.
	Bengal.									Rs. A.
	Office of the Inspector-General of Registration									
1	Burdwan	22	165	2,080	1,848	82	2,526	3,208	9,909	8,006 12
2	Bankoora	4	23	235	669		2,337	47	3,311	2,306 8
3	Beerbhoom	7	123	512	510	9	700	993	2,907	2,520 0
4	Midnapore	14	127	1,129	1,245	8	3,040	3,168	9,026	6,583 8
5	Hooahly	6	61	1,093	652	113	1,114	4,818	4,976	8
6	Howrah	6	52	980	557	73	1,054	4,515	7,231	5,361 12
7	24-Perumnalis	20	116	3,162	2,027	110	5,958	7,820	19,233	14,566 12
8	Calcutta	1	49	1,163	700	442	43	549	2,952	17,280 12
9	Nuddica	12	62	725	984	75	4,400	5,465	11,851	7,492 0
10	Jessore	20	82	806	1,069	58	32,272	1,616	35,963	20,395 8
11	Moorshedabad	8	88	691	768	31	1,360	525	3,412	3,598 0
12	Dinajepore	6	28	444	280	14	83	326	1,174	1,623 8
13	Rajshahye	7	21	167	233	78	362	1,165	1,967	1,937 4
14	Rungpore	7	63	1,029	593	12	160	2,241	4,047	3,515 4
15	Bogra	3	27	96	179	9	91	1,820	2,271	1,605 12
16	Pubna	3	49	174	259	21	1,525	1,335	3,303	2,403 12
17	Darjeeling	3	3	104	52		1	31	191	402 0
18	Jalpioree	3	9	605	363	3	12	395	1,317	1,341 12
19	Dacca	8	146	1,669	1,566	153	922	5,067	9,523	8,797 12
20	Furzedpore	8	24	567	632	197	11,455	3,110	16,019	9,460 0
21	Backergunge	14	77	1,789	2,489	30	16,129	1,117	21,631	14,518 0
22	Mymensingh	8	218	1,252	722	15	420	11,571	14,198	9,981 12
23	Tippurah	10	38	860	877	56	1,296	6,504	9,631	6,364 12
24	Chittagong	9	43	1,539	1,006	110	11,821	296	14,815	9,250 4
25	Noakholly	10	44	1,160	904	53	4,092	2,809	8,971	6,088 8
	Behar.									
26	Patna	7	57	1,794	1,857	268	223	2,373	6,572	9,957 12
27	Gya	5	53	1,050	1,241	23	375	1,867	4,009	6,350 0
28	Shahabad	9	16	1,188	2,309	140	46	1,698	5,387	6,482 4
29	Mozafferpore	7	26	1,238	1,477	22	72	2,806	5,644	6,779 8
30	Darbhanga	7	17	954	980	37	59	3,566	5,613	5,765 8
31	Saran	6	31	896	2,347	103	66	2,051	5,494	6,992 4
32	Chumpanur	2	6	122	268	2	21	2,177	25,186	8,697 8
33	Monghyr	8	16	878	1,456	79	81	6,028	8,538	7,807 12
34	Bhagulpore	5	14	477	844	9	221	4,998	6,563	5,783 4
35	Purnea	6	10	482	376	8	221	2,558	3,655	3,616 12
36	Madiah	3	28	201	110		2,017	900	3,559	2,242 8
37	Southal Perumnalis	6	12	195	310	2	36	179	734	875 8
	Orissa.									
38	Cuttack	3	32	481	483	30	25	282	1,333	1,464 12
39	Pooree	2	24	646	461	1		431	1,566	1,291 12
40	Balasore	4	20	280	180	48	33	456	1,017	877 8
	Chota Nagpore.									
41	Hazareebagh	4	4	85	436	18	240	1,141	1,924	1,308 0
42	Lohardugga	2	18	140	682	63	314	782	1,899	2,327 8
43	Singbhoom	1		18	27	1	13	203	292	217 8
44	Muridhoon	4	8	238	412	1	891	1,169	2,719	1,992 4
	Office of the Registrar of Joint-Stock Companies									
	(GRAND TOTAL	300	2,170	35,737	37,589	2,637	108,678	125,211	312,022	2,50,698 0

STATEMENTS.—continued.

Registration Offices in Bengal in the year 1877-78.

11	12	13	14	15	16	17	18	19	20
IMMOVABLE PROPERTY, BOOK I.									
OPTIONAL.									
Instruments of sale of the value of less than Rs. 100.	Instruments of mortgage of the value of less than Rs. 100.	Other instruments registered under section 18, clauses a and b.	Leases for one year or less under section 18, clause c, and leases exempted under the provision in section 17.	Awards.	Miscellaneous registrations other than certified copies of decrees and orders of Court.	Certified copies of decrees and orders of Court.	Total of optional registrations relating to immovable property.	Ordinary fees paid for the same.	Total value of immovable property transferred.
								Rs. A.	Rs.
10,125	5,966	8	52	287	0	13,844	8,146 12		23,09,501
1,317	1,227		21	65		2,630	1,517 0		4,29,515
2,873	1,163	16	10	89	5	4,156	2,104 8		9,52,520
6,659	2,855	1	67	6	166	9,774	5,636 4		20,79,440
2,223	417	16	19	43	2	2,720	1,611 4		11,10,564
2,068	390	7	16	60	1	2,579	1,337 0		13,67,456
7,255	3,171	29	214	2	219	10,928	6,191 0		45,40,443
33	3	10	39	4	170	272	442 0		2,17,57,008
1,094	1,076	12	24	204	10	3,020	1,422 8		14,21,182
4,157	2,756	9	151	191	23	7,087	4,163 8		17,58,427
2,622	651	4	27	76	3	2,813	1,626 4		14,72,715
1,286	141	2	30	39	5	1,563	898 4		10,22,184
167	78	1	12	5		263	151 12		6,15,913
2,510	615	2	118	84	5	3,364	2,015 8		11,35,249
213	155	2	16	2	5	393	235 0		3,51,500
543	124	1	48	39		559	381 8		5,78,138
13	8			11	9	41	97 0		4,11,933
502	118		47	22		719	429 8		4,43,410
1,527	460	7	504	173		2,671	1,780 6		31,17,217
1,829	498	82	64	83	12	2,551	1,575 8		8,71,853
4,810	4,010	45	119	210	2	9,196	5,685 0		24,68,154
1,905	215	6	205	146		1,607	1,227 2		19,07,385
2,087	814	3	218	92	3	3,217	1,952 0		13,37,728
3,774	2,129	79	226	140	14	6,365	3,539 8		12,68,282
5,546	1,516	68	242	112	6	5,520	3,220 12		9,93,608
762	635	11	44	167	1	1,620	1,115 12		67,88,229
384	368		50	201	2	1,013	1,319 8		30,63,866
515	516	6	2	142	3	1,181	1,184 8		30,64,153
688	459	4	13	271	1	1,336	1,008 12		36,16,483
490	296	8	2	89		825	1,105 12		61,36,519
516	1,397	14	18	110	3	2,038	1,332 4		41,88,312
86	54	1		2		117	98 8		8,18,607
459	329	7	24	48		867	690 12		32,73,733
343	242		6	65		657	756 12		25,41,569
1,162	406		4	98	89	1,759	1,337 0		23,23,671
1,258	303		31	148	11	1,751	1,193 12		4,83,166
1,382	1,025		16	12	1	2,436	1,362 0		4,51,932
1,289	168	1	2	44	8	1,512	869 0		7,56,963
1,744	741		12	33	19	2,549	1,181 12		4,73,187
964	148	3	14	36	9	1,180	681 12		3,89,218
91	367		65	6		521	299 4		6,17,498
122	663	1	24	31		853	550 8		8,30,277
31	14	2				47	24 0		40,413
648	993	1	50	15		1,707	958 4		4,99,850
77,181	36,615	485	2,926	23	4,236	326	121,842	77,033 12	9,62,32,287

B.—JUDICIAL

12A.—General Statement of Deeds registered in the

Number.	DISTRICTS.	21	22	23	24	25	26	27
		INSTRUMENTS OF SALE, &c., OF MOVABLE PROPERTY.	CHARGES FOR THE PAYMENT OF MONEY.	ALL OTHER DOCUMENTS REGISTERED UNDER SECTION 18.	TOTAL OF REGISTRATIONS IN BOOK IV.	ORDINARY FEES PAID FOR THE SAME.	NUMBER OF SCALED COVERS DEPOSITED, BOOK V.	NUMBER OF WILLS REGISTERED, BOOK III.
						Rs. A.		
	<i>Bengal.</i>							
	Office of the Inspector-General of Registration.							
1	Burdwan	124	1,656	421	2,201	2,126 12		178
2	Bankoora	31	216	53	300	234 4		16
3	Beerbhoom	50	227	51	328	206 12		52
4	Midnapore	73	2,077	355	2,507	2,028 0		77
5	Hoochly	81	885	253	1,219	1,107 4	1	58
6	Howrah	58	766	210	1,034	873 12		55
7	24 Pergunnahs	219	6,510	1,282	7,841	5,910 4		153
8	Calcutta	49	310	227	586	1,696 4	14	47
9	Nuldea	175	6,852	1,069	8,096	5,709 12		117
10	Jessore	237	49,176	996	50,199	29,415 4		78
11	Moorshedabad	67	480	233	780	985 8		201
12	Dinapore	7	274	300	581	637 8		33
13	Rajshahy	35	514	323	871	835 8		76
14	Rangpore	10	383	282	675	904 12		38
15	Bogra	10	565	262	827	743 8		34
16	Patna	20	558	415	1,023	955 4	3	76
17	Darjeeling	6	60	26	92	132 0		
18	Jalpiore	11	161	121	293	592 4		11
19	Dacca	113	561	219	2,823	3,399 4	1	111
20	Farrakpore	48	1,665	881	2,594	2,122 8		73
21	Backergunge	136	6,107	1,687	7,930	5,631 4	3	63
22	Mymensingh	40	252	735	1,027	1,468 0		93
23	Tippurah	139	580	851	1,559	1,689 8		57
24	Chittagong	204	707	922	1,833	1,640 8	1	27
25	Noakhally	249	872	2,568	5,689	3,129 4		15
	<i>Behar.</i>							
26	Patna	131	535	269	935	1,531 0	2	15
27	Gya	36	492	123	651	726 8		10
28	Shahabad	41	162	72	275	353 0		8
29	Muzafferpore	214	634	171	1,019	1,206 12	1	4
30	Darbhanga	201	579	422	1,292	1,639 8		3
31	Saran	80	688	268	1,036	1,122 12		14
32	Chumparan	127	409	1,430	1,966	3,688 12		
33	Monghyr	207	889	135	831	1,034 4		3
34	Bhagalpore	296	695	419	1,400	1,189 12	1	7
35	Purneah	34	273	147	454	584 8		2
36	Maidah	20	213	116	349	338 4		59
37	Southern Pergunnahs	33	927	70	1,030	732 4		2
	<i>Orissa.</i>							
38	Cuttack	11	196	67	274	323 0	2	13
39	Pooree	3	369	85	397	414 0		61
40	Balasore	23	255	64	342	389 4		26
	<i>Chota Nagpore.</i>							
41	Hazareebagh	33	231	37	301	396 8		1
42	Lohardugga	18	231	52	301	374 0		
43	Singbhoom	8	8	11	19	22 0		1
44	Munbhoom	28	248	238	514	493 12		1
	Office of the Registrar of Joint-Stock Companies							
	GRAND TOTAL	3,718	89,818	20,880	114,410	90,273 8	29	1,951

C.-

GENERAL

Showing the Distribution of the PRISONERS OF ALL CLASSES

1	2	3	4			5			6		
			Remained at the commencement of the year 1877.			Received during the year 1877.			Total.		
STATIONS.	Place of confinement	Classes of prisoners.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Burdwan ...	District Jail.	Convicts ...	325	17	342	561	33	594	886	50	936
		Under-trial ...	17	3	20	170	15	185	187	18	205
		Civil ...	1	...	1	36	...	36	37	...	37
Cutwa ...	Lock-up ...	Convicts ...	3	...	3	191	16	207	194	16	210
		Under-trial ...	1	...	1	126	20	146	127	20	147
Bood-Bood ...	Ditto ...	Convicts ...	1	...	1	220	4	230	227	4	231
		Under-trial ...	1	...	1	135	5	140	136	5	141
Ranoegunge ...	Ditto ...	Convicts ...	2	...	2	158	11	169	160	11	171
		Under-trial ...	2	...	2	166	4	170	168	4	172
Culma ...	Ditto ...	Convicts ...	1	...	1	91	1	92	12	1	13
		Under-trial ...	5	...	5	74	3	77	79	3	82
		Civil ...	...	...	...	3	...	3	3	...	3
Jehanabad ...	Ditto ...	Convicts ...	1	...	1	61	5	66	62	5	67
		Under-trial ...	7	...	7	91	9	100	98	9	107
Bankoora ...	District Jail.	Convicts ...	253	13	266	241	8	249	494	21	515
		Under-trial ...	1	1	2	168	21	189	172	22	194
		Civil ...	...	...	...	11	...	11	11	...	11
Beerbhoom ...	Ditto ...	Convicts ...	311	17	328	529	52	581	840	69	909
		Under-trial ...	9	...	9	350	33	383	359	33	392
		Civil ...	1	...	1	...	...	...	1	...	1
Midnapore ...	District and Central Jail	Convicts ...	1,022	29	1,051	1,245	62	1,307	2,267	91	2,358
		Under-trial ...	...	2	2	110	12	122	110	14	124
		Civil ...	1	...	1	32	...	32	33	...	33
Magistrate's hajat	...	Convicts ...	1	...	1	...	...	...	1	...	1
		Under-trial ...	4	1	5	386	32	418	390	33	423
Tumlook ...	Lock-up ...	Convicts ...	3	...	3	124	11	135	127	11	138
		Under-trial ...	2	2	4	115	7	122	117	9	126
Ghatal ...	Ditto ...	Convicts ...	3	...	3	110	14	124	113	14	127
		Under-trial ...	...	...	...	87	10	97	87	10	97
Contai ...	Ditto ...	Convicts ...	4	1	5	204	13	217	208	14	222
		Under-trial ...	8	...	8	244	20	264	252	20	272
Hooghly ...	District Jail.	Convicts ...	493	...	499	679	18	697	1,168	18	1,186
		Under-trial ...	7	2	9	202	21	223	209	23	232
		Civil ...	...	...	...	1	...	1	1	...	1
Serampore ...	Lock-up ...	Convicts ...	2	...	2	364	25	389	369	25	394
		Under-trial ...	7	3	10	328	37	365	335	40	375
		Civil ...	1	...	1	38	2	40	42	2	44
Howrah ...	Ditto ...	Convicts ...	2	...	2	726	63	789	728	63	791
		Under-trial ...	9	3	12	428	33	461	437	36	473
Moheshreka	Ditto ...	Convicts ...	2	...	2	189	22	211	191	22	213
		Under-trial ...	1	...	1	129	21	150	130	21	151

PRISONS.

M M A R Y.

confined in the Jails and Lock-ups of Bengal during the year 1877.

7			8			9			10		
Discharged from all causes.			Remaining at the end of the year 1877.			Daily average number of each class.			Total daily average of the whole jail.		
M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
62	42	124	204	8	212	247.65	10.02	257.67	257.95	10.55	268.50
179	16	195	8	2	10	9.01	0.53	9.54			
34	...	34	3	...	3	1.26	.....	1.26		
193	15	208	1	1	2	2.80	0.21	3.01	5.61	0.86	6.47
126	20	146	1	...	1	2.81	0.65	3.46			
204	4	208	23	...	23	4.19	0.06	4.25			
134	5	139	2	...	2	3.67	0.15	3.82	7.86		8.07
155	10	165	5	1	6	4.03	0.30	4.33	6.83	0.40	7.23
165	4	169	3	...	3	2.80	0.10	2.90			
90	1	91	2	...	2	2.21	0.02	2.23			
75	3	78	4	...	4	3.18	0.01	3.19	5.41	0.03	5.44
3	...	3	.....	...	.....	0.02	.....	0.02
60	5	65	2	...	2	1.80	0.10	1.90			
98	9	107	3.50	0.30	3.80	5.30	0.40	5.70
421	16	437	73	5	78	126.08	6.65	132.73	132.02	7.21	139.23
165	21	186	7	1	8	5.06	0.57	5.63			
8	...	8	3	...	3	0.28	.....	0.28		
707	58	765	133	11	144	206.99	15.02	221.01	216.52	16.04	232.56
344	32	376	15	1	16	9.59	1.02	10.61			
1	...	1	.....	...	.....	.....	.....	.....
659	70	1,129	1,208	21	1,229	969.35	23.35	992.70	987.23	24.23	1,011.45
97	14	111	13	...	13	15.33	0.87	16.20			
30	...	30	3	...	3	2.55	.....	2.55		
370	52	402	1	...	1	1.00	1.00	10.33	0.52	10.85
119	11	130	8	...	8	9.33	0.52	9.85			
110	8	118	7	1	8	4.94	0.10	5.04			
110	14	124	3	...	3	4.26	0.10	4.36	9.20		9.40
83	10	93	4	...	4	3.47	0.14	3.61	5.89	0.32	6.21
203	13	216	5	1	6	2.12	0.18	2.30			
210	19	229	12	1	13	6.40	0.10	6.50			
864	18	882	304	...	304	5.40	0.80	6.20	11.80		12.70
205	22	227	4	1	5	313.28	2.32	315.60	320.83	3.03	323.86
1	...	1	.....	...	.....	7.55	0.71	8.26
364	25	389	2	...	2	.....	.....	.....
332	40	372	3	...	3	2.67	0.12	2.79	1.79	1.37	17.36
40	2	42	2	...	2	9.11	0.96	10.07			
726	63	789	2	...	2	4.01	0.49	4.50			
422	54	476	15	...	17	4.80	0.23	5.03	13.60	0.87	14.47
189	22	211	2	...	2	8.80	0.64	9.44			
127	21	148	3	...	3	2.69	0.09	2.78			
						1.60	0.23	1.82	4.38	0.32	4.70

GENERAL

Showing the Distribution of the PRISONERS OF ALL CLASSES

1	2	3	4			5			6		
			Remained at the commencement of the year 1877.			Received during the year 1877.			Total.		
STATIONS.	Place of confinement.	Classes of prisoners.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Calcutta	European Jail	Convicts ...	68	1	69	638	8	646	706	9	715
		Under-trial ...	1	...	1	67	1	68	68	1	69
		Civil ...	6	...	6	53	5	58	59	5	64
	District and Central Jail	Convicts ...	873	...	873	2,190	155	2,345	3,063	155	3,218
		Under-trial ...	32	...	32	432	21	453	464	21	485
		Civil ...	14	...	14	277	29	306	291	29	320
Alipore, 24-Per-gunnahs	European ward in the District and Central Jail	Convicts ...	1	...	1	6	...	6	7	...	7
		Under-trial ...	...	...	...	4	...	4	4	...	4
		Civil ...	...	...	...	...	...	...	...	...	...
Diamond Har-bour...	District and Central Jail	Convicts ...	2,014	...	2,014	3,300	...	3,300	5,314	...	5,314
		Under-trial ...	19	...	19	576	...	576	595	...	595
		Civil ...	2	...	2	50	...	50	52	...	52
Barrapore	Lock-up	Convicts ...	3	...	3	112	2	114	115	2	117
		Under-trial ...	...	...	...	77	...	77	77	...	77
Sathkira	Ditto	Convicts ...	1	...	1	164	4	168	165	4	169
		Under-trial ...	...	...	...	133	1	134	133	1	134
Busseerhat	Ditto	Convicts ...	2	...	2	129	2	131	131	2	133
		Under-trial ...	...	...	...	145	5	150	145	5	150
Dum-Dum	Ditto	Convicts ...	1	...	1	28	4	32	29	4	33
		Under-trial ...	1	...	1	45	6	51	46	6	52
Barrackpore	Ditto	Convicts ...	1	...	1	87	11	98	88	11	99
		Under-trial ...	...	1	1	73	16	89	74	17	91
		Civil ...	...	...	...	3	...	3	3	...	3
Rusna, 24-Per-gunnahs.	District and Central Penitentiary Jail	Convicts ...	...	...	188	...	490	490	...	...	678
		Under-trial ...	...	...	...	...	37	37	...	...	37
		Civil ...	...	1	1	...	5	5	...	...	6
Baraset, 24-Per-gunnahs.	Sub divisional Jail	Convicts ...	195	...	195	240	7	247	435	7	442
		Under-trial ...	3	1	4	83	4	87	86	5	91
		Civil ...	...	...	...	9	...	9	9	...	9
Nuddea	District Jail	Convicts ...	332	31	363	842	50	892	1,174	81	1,255
		Under-trial ...	16	1	17	224	14	238	240	15	255
		Civil ...	2	...	2	10	...	10	12	...	12
Meherpore	Lock-up	Convicts ...	1	...	1	160	7	167	161	7	168
		Under-trial ...	...	...	...	86	4	90	86	4	90
Kooshtea	Ditto	Convicts ...	1	...	1	292	8	300	293	8	301
		Under-trial ...	2	...	2	205	8	213	207	8	215
		Civil ...	...	...	...	1	...	1	1	...	1
Chooadangah.	Ditto	Convicts ...	2	...	2	108	10	118	110	10	120
		Under-trial ...	10	...	10	102	7	109	112	7	119

SONS—continued.

M A R Y—continued.

ined in the Jails and Lock-ups of Bengal during the year 1877.

7			8			9			10		
Discharged from all causes.			Remaining at the end of the year 1877.			Daily average number of each class.			Total daily average of the whole jail.		
	M.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
39	6	615	67	3	70	62 00	0 52	62 52			
63	1	61	5	5	10	1 05	0 03	1 08	67 63	0 66	68 29
56	5	61	3	...	3	3 68	0 11	3 79			
77	155	2,032	986	...	986	916 27	0 12	917 39			
13	21	464	21	...	21	13 57	0 57	14 14	975 94	2 04	977 98
75	29	304	16	...	16	15 19	1 05	16 24			
7	...	7	...	...	...	0 50	...	0 50			
4	...	4	...	...	...	0 13	...	0 13	0 63	...	0 63
82	...	3,282	2,062	...	2,062	2,005 98	...	2,005 98			
82	...	582	13	...	13	2 56	...	2 56	2,121 13	...	2,121 13
46	...	46	6	...	6	4 22	...	4 22			
12	2	114	3	...	3	2 85	0 03	2 88			
77	...	77	...	...	...	1 95	...	1 95	4 80	0 03	4 83
93	4	97	2	...	2	1 86	0 02	1 88			
74	...	74	...	...	...	1 79	0 01	1 80	3 65	0 03	3 68
162	4	168	3	...	3	3 00	0 03	3 03			
133	1	134	...	...	...	3 30	0 01	3 31	6 30	0 04	6 34
130	2	132	1	...	1	1 30	0 16	1 46			
138	5	143	7	...	7	4 19	0 02	4 21	5 49	0 18	5 67
28	4	32	1	...	1	1 02	0 01	1 03			
16	6	52	...	...	...	0 81	0 19	1 00	1 83	0 29	2 03
87	11	98	1	...	1	1 33	0 03	1 36			
73	17	90	...	...	...	1 19	0 12	1 31	2 38	0 15	3 03
1	...	1	2	...	2	0 06	...	0 06			
...	480	480	...	198	198	...	191 79	191 79			
...	33	33	...	4	4	...	1 30	1 30	...	193 24	193 24
...	6	6	...	...	...	...	0 15	0 15			
174	7	181	261	...	261	183 54	0 12	183 66			
86	5	91	...	...	...	2 59	0 16	2 75	187 11	0 28	187 39
7	...	7	2	...	2	0 98	...	0 98			
895	66	961	279	15	294	295 86	16 46	312 32			
232	14	246	8	1	9	14 35	0 95	15 30	311 47	17 41	328 88
12	...	12	...	...	...	1 26	...	1 26			
161	7	168	...	...	...	1 16	...	1 16			
86	4	90	...	...	...	2 86	...	2 86	4 02	...	4 02
280	8	297	4	...	4	2 12	0 09	2 21			
263	8	271	...	...	...	5 26	0 19	5 45	7 73	0 28	8 01
1	...	1	...	...	...	0 05	...	0 05			
109	10	119	1	...	1	2 60	0 10	2 70			
112	7	119	...	...	...	2 00	0 10	2 10	4 60	0 20	4 80

Showing the Distribution of the PRISONERS OF ALL CL.

1	2	3	4			5			6	
STATIONS.	Place of confinement.	Classes of prisoners.	Remained at the commencement of the year 1877.			Received during the year 1877.			Total.	
			M.	F.	Total	M.	F.	Total.	M.	F.
Ranaghat ...	Lock-up ...	Convicts ...	1	...	1	98	18	116	99	18
		Under-trial	2	...	2	157	12	169	159	12
Bongong ...	Ditto ...	Convicts ...	2	...	2	158	2	160	160	2
		Under-trial	4	...	4	188	11	199	192	11
		Civil ...	...	...	...	1	...	1	1	...
Jessore ...	District Jail	Convicts ...	541	17	558	1,141	31	1,172	1,682	48
		Under-trial	15	5	20	474	23	497	449	28
		Civil ...	4	...	4	34	...	34	38	...
Khoolna ...	Lock-up ...	Convicts ...	1	...	1	118	1	119	119	1
		Under-trial	9	...	9	98	2	100	107	2
Bagirhat ...	Ditto ...	Convicts ...	1	...	1	314	7	351	345	7
		Under-trial	4	...	4	235	9	244	259	9
Narail ...	Ditto ...	Convicts ...	3	...	3	209	3	212	212	3
		Under-trial	5	1	6	196	5	201	201	6
Jhenidah ...	Ditto ...	Convicts ...	1	...	1	190	4	194	191	4
		Under-trial	7	...	7	104	2	106	111	2
Magoorah ...	Ditto ...	Convicts ...	1	1	2	130	3	133	131	4
		Under-trial	1	...	1	89	7	96	90	7
Moorshedabad	District Jail	Convicts ...	414	31	445	790	54	814	1,204	85
		Under-trial	1	...	1	43	5	48	44	5
		Civil ...	4	...	4	20	...	20	24	...
Lalbagh ...	Lock-up ...	Convicts ...	1	...	1	115	8	123	116	8
		Under-trial	1	...	1	123	7	130	124	7
Rampore Haut	Ditto ...	Convicts ...	1	...	1	184	29	213	185	29
		Under-trial	9	...	9	173	17	190	182	17
Jungypore ...	Ditto ...	Convicts ...	10	...	10	155	9	164	165	9
		Under-trial	1	...	1	147	13	160	148	13
Chaltiah ...	Ditto ...	Convicts ...	3	...	3	296	21	317	299	21
		Under-trial	19	1	15	624	44	668	658	45
Dinagapore ...	District Jail	Convicts ...	560	10	570	516	17	533	1,076	27
		Under-trial	42	2	44	448	23	471	490	23
		Civil ...	6	...	6	55	1	56	61	1
Maldah ...	Ditto ...	Convicts ...	66	5	71	435	22	457	501	27
		Under-trial	8	2	10	308	12	320	316	14
		Civil ...	7	...	7	42	1	43	49	1
Rajshahye ...	District and Central Jail	Convicts ...	837	8	845	818	35	853	1,655	43
		Under-trial	31	5	36	388	29	417	419	34
		Civil ...	5	...	5	28	...	28	33	...
	Magte's <i>hajut</i>	Under-trial	2	...	2	153	6	164	160	6
Nattoro ...	Lock-up ...	Convicts ...	3	...	3	241	10	251	244	10
		Under-trial	3	...	3	223	10	233	226	10

ISONS—continued.

M M A R Y—continued.

fined in the Jails and Lock-ups of Bengal during the year 1877.

7			8			9			10		
Discharged from all causes.			Remaining at the end of the year 1877.			Daily average number of each class.			Total daily average of the whole jail.		
L.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	P.	Total.
97	18	115	9	...	2	1'06	0'01	1'07	4'15	0'06	4'21
156	12	168	3	...	3	3'09	0'05	3'14			
158	2	160	2	...	2	1'98	0'26	2'24	7'77	0'28	8'05
189	9	198	3	2	5	5'78	0'02	5'80			
1	...	1	0'01	...	0'01			
314	41	1,355	368	7	375	423'27	8'75	432'02	449'70	10'15	460'15
331	25	456	18	3	21	22'83	1'70	24'53			
33	...	33	5	...	5	5'60	...	5'60			
117	...	117	2	1	3	2'50	0'10	2'60	6'40	0'50	6'90
106	2	108	1	...	1	3'90	0'10	4'00			
314	7	351	1	...	1	6'21	0'15	6'36	16'59	0'55	17'12
237	9	236	12	...	12	10'68	0'38	11'06			
208	3	211	4	...	4	2'74	0'02	2'76	9'00	0'22	9'22
189	6	205	2	...	2	6'26	0'20	6'46			
190	4	194	1	...	1	2'20	0'01	2'21	4'20	0'02	4'22
110	2	112	1	...	1	2'00	0'01	2'01			
130	4	134	1	...	1	1'80	0'08	1'88	3'00	0'15	3'15
88	7	95	2	...	2	1'20	0'10	1'30			
884	68	952	320	17	337	3,67'04	19'25	3,86'29	372'48	19'50	392'07
30	4	43	6	1	7	3'50	0'34	3'84			
22	...	22	2	...	2	1'94	...	1'94			
115	8	123	1	...	1	1'70	0'04	1'74	6'30	0'20	6'50
122	7	129	2	...	2	4'60	0'22	4'82			
183	20	212	2	...	2	3'03	0'10	3'13	9'12	0'50	9'62
175	14	189	7	3	10	6'09	0'10	6'19			
157	8	165	8	1	9	7'05	0'25	7'30	12'60	0'80	13'40
117	13	160	1	...	1	5'55	0'55	6'10			
206	21	317	3	...	3	3'00	...	3'00	15'50	0'87	16'37
550	45	675	8	...	8	12'50	0'87	13'37			
748	25	771	328	4	332	431'25	6'67	437'92	457'67	7'66	465'33
184	25	509	6	...	6	21'25	0'90	22'15			
56	1	57	5	...	5	5'17	0'09	5'26			
337	25	462	64	2	66	64'78	1'33	66'11	82'03	4'78	86'81
303	14	317	13	...	13	14'27	0'14	14'71			
49	1	50	...	...	...	2'98	0'01	2'99
288	30	958	727	13	740	701'15	8'05	709'18	749'74	9'08	759'72
108	33	441	11	1	12	37'22	1'95	39'17			
28	...	28	5	...	5	2'37	...	2'37			
160	6	166	1'60	0'01	1'61	1'60	0'01	1'61
235	9	244	9	1	10	5'80	0'01	5'81			
224	10	234	2	...	2	3'30	0'30	3'60	9'10	0'31	9'41

Showing the Distribution of the PRISONERS OF ALL CL

1	2	3	4			5			6	
STATIONS.	Place of confinement.	Classes of prisoners.	Remained at the commencement of the year 1877.			Received during the year 1877.			Total.	
			M.	F.	Total.	M.	F.	Total.	M.	F.
Rungpore	District Jail	Convicts ...	453	6	459	772	24	796	1,225	30
		Under-trial Civil ...	18	2	20	395	12	407	413	14
			1	...	1	24	...	24	25	...
Bhowanigunge	Magte's <i>hajut</i>	Convicts ...	...	...	...	1	...	1	1	...
		Under-trial ...	...	...	...	243	3	246	242	3
Kurigaon	Lock-up	Convicts ...	1	...	1	197	6	203	199	6
		Under-trial ...	4	1	5	184	6	190	188	7
Bardogra	Ditto	Convicts ...	...	...	...	125	1	126	125	1
		Under-trial ...	3	...	3	117	3	120	120	3
Bogra	Ditto	Convicts ...	1	...	1	71	1	72	72	1
		Under-trial ...	1	...	1	83	2	85	84	2
Bogra	District Jail	Convicts ...	130	9	139	658	33	691	788	43
		Under-trial ...	8	...	8	576	32	608	584	32
		Civil ...	4	...	4	58	...	58	62	...
Pabna	Ditto	Convicts ...	170	2	172	529	11	540	609	13
		Under-trial ...	1	1	2	206	6	212	207	7
		Civil ...	1	...	1	19	...	19	20	...
Serajunge	Lock-up	Convicts ...	2	...	2	274	3	277	276	3
		Under-trial ...	15	1	16	303	4	307	318	5
		Civil ...	...	...	...	1	...	1	1	...
Darjeeling	District Jail	Convicts ...	41	2	43	141	12	153	182	14
		Under-trial ...	3	...	3	152	16	168	155	16
		Civil ...	3	1	4	20	1	21	23	2
Julpigoree	Ditto	Convicts ...	137	...	137	476	14	490	613	14
		Under-trial ...	28	...	28	332	9	341	360	9
		Civil ...	1	...	1	15	...	15	16	...
Buxa	Magte's <i>hajut</i>	Under-trial	10	...	10	464	...	464	474	...
Buxa	Lock-up	Convicts ...	2	...	2	63	...	63	65	...
		Under-trial ...	2	...	2	82	...	82	84	...
Dacca	District Jail	Convicts ...	691	14	708	1,573	37	1,610	2,267	51
		Under-trial ...	25	...	25	120	80	150	145	30
		Civil ...	18	...	18	80	...	80	98	...
Dacca	Magte's <i>hajut</i>	Convicts ...	1	...	1	...	...	...	1	...
		Under-trial ...	29	...	29	562	...	562	591	...
Manickgunge	Lock-up	Convicts ...	2	...	2	452	10	452	444	10
		Under-trial ...	...	...	...	144	3	147	144	3
		Civil ...	...	...	...	2	...	2	2	...
Moonsheegunge	Ditto	Convicts ...	2	...	2	297	5	302	299	5
		Under-trial ...	3	1	4	121	8	129	124	9
		Civil ...	...	...	...	2	...	2	2	...
Furreedpore	District Jail	Convicts ...	311	2	313	753	12	765	1,094	14
		Under-trial ...	9	...	9	336	6	342	345	6
		Civil ...	...	...	...	21	...	21	21	...

ISONS—continued.

M M A R Y—continued.

ined in the Jails and Lock-ups of Bengal during the year 1877.

7			8			9			10		
Discharged from all causes.			Remaining at the end of the year 1877.			Daily average number of each class.			Total daily average of the whole jail.		
F.	Total.		M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
27	25	952	208	5	303	354.58	3.84	358.42			
07	14	421	6	...	6	19.08	1.10	20.18	376.64	4.94	381.58
24	...	24	1	...	1	3.03	.....	3.03			
1	...	1	...	...	...	1.50	0.01	1.51	1.50	0.01	1.51
42	3	245	1	...	1	...	...	...
96	6	202	2	...	2	3.58	0.31	3.89	10.57	0.46	11.03
84	7	191	4	...	4	6.39	0.15	7.14			
24	1	125	1	...	1	1.70	...	1.70	4.40	0.08	4.48
20	3	123	...	...	...	2.70	0.08	2.78			
61	1	62	11	...	11	1.46	0.01	1.41	4.70	0.21	4.91
81	2	83	3	...	3	3.30	0.20	3.50			
85	38	723	103	4	107	139.99	5.36	145.35	158.57	5.98	164.55
41	30	611	3	2	5	16.20	0.62	16.82			
41	...	61	1	...	1	2.38	.....	2.38			
76	12	588	123	1	124	121.84	1.61	123.45	133.12	1.79	134.91
02	7	200	5	...	5	10.06	0.18	10.24			
09	...	19	1	...	1	1.22	.....	1.22			
92	3	255	24	...	24	9.32	0.05	9.47			
15	5	320	3	...	3	11.23	0.06	11.29	20.70	0.11	20.81
1	...	1	...	...	...	0.05	.....	0.05			
85	9	144	47	5	52	41.52	2.43	43.95	46.08	2.84	48.92
01	16	167	4	...	4	8.18	0.32	8.50			
21	1	22	2	1	3	1.38	0.09	1.47			
14	14	538	89	...	89	111.87	1.83	113.70	129.02	2.06	131.98
8	9	367	2	...	2	17.21	0.23	17.44			
6	...	16	...	...	...	0.84	.....	0.84			
0	...	460	14	...	14	9.80	.....	9.80	9.80	.....	9.80
5	...	65	...	...	...	0.60	.....	0.60	1.20	.....	2.20
3	...	83	1	...	1	1.60	.....	1.60			
1	33	1,704	596	18	614	565.11	10.63	575.74	589.46	12.82	602.28
5	27	162	10	3	13	13.91	2.19	16.10			
9	...	80	9	...	9	9.44	.....	9.44			
...	...	...	1	...	1	1.00	.....	1.00	25.76	...	25.76
4	...	664	27	...	27	24.76	...	24.76			
5	10	445	9	...	9	7.20	0.07	7.27			
3	3	146	1	...	1	2.13	0.02	2.15	0.37	0.09	0.46
2	...	2	...	...	...	0.04	.....	0.04			
3	5	303	1	...	1	4.08	0.09	4.17	7.02	0.38	7.40
1	9	132	1	...	1	2.93	0.29	3.22			
1	...	2	...	...	...	0.01	.....	0.01			
1	11	811	291	3	297	314.70	1.64	316.34	337.98	2.04	340.02
1	6	343	8	...	8	20.80	0.40	21.20			
1	...	18	3	...	3	2.48	.....	2.48			

GENE

Showing the Distribution of the PRISONERS OF ALL CL

1	2	3	4			5			6		
STATIONS.	Place of confinement.	Classes of prisoners.	Remained at the commencement of the year 1877.			Received during the year 1877.			Total.		
			M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Goalundo ...	Lock-up ...	Convicts ...	1	...	1	127	4	131	128	...	...
		Under-trial ...	3	...	3	169	3	172	172	...	...
Madareepore...	Ditto ...	Convicts ...	9	...	9	368	2	370	370	...	...
		Under-trial ...	11	...	11	219	3	222	230	...	...
Backergunge...	District Jail	Convicts ...	479	4	483	1,032	11	1,043	1,511	...	...
		Under-trial ...	23	...	23	459	17	476	482	...	...
		Civil ...	2	...	2	17	1	18	19	...	...
Perozepore ...	Lock-up ...	Convicts ...	2	...	2	161	...	161	163	...	...
		Under-trial ...	3	...	3	195	3	198	198	...	...
Patoakhally ..	Ditto ...	Convicts ...	1	...	1	144	1	145	145	...	...
		Under-trial ...	2	...	2	128	...	128	130	...	...
Bhola ...	Ditto ...	Convicts ...	...	...	...	193	3	196	198	...	...
		Under-trial ...	...	...	...	214	4	218	214	...	...
Mymensingh ...	District Jail	Convicts ...	455	10	465	919	19	938	1,401	...	...
		Under-trial ...	54	...	54	346	14	360	410	...	...
		Civil ...	3	...	3	38	...	38	41	...	...
Attiah ...	Lock-up ...	Convicts ...	8	...	8	191	1	192	199	...	...
		Under-trial ...	8	...	8	96	2	98	104	...	...
Jamalpore ...	Ditto ...	Convicts ...	3	...	3	125	1	126	128	...	...
		Under-trial ...	...	...	...	124	2	126	124	...	...
Kishoregunge..	Ditto ...	Convicts ...	10	...	10	229	5	234	239	...	...
		Under-trial..	5	...	5	129	6	135	134	...	...
Tipperah ...	District Jail	Convicts ...	230	7	237	657	9	666	927	...	...
		Under-trial..	13	2	15	311	8	319	324	...	...
		Civil ...	3	...	3	40	...	40	43	...	...
Nasirnuggur ...	Lock-up ...	Convicts ...	8	...	8	190	4	194	198	...	...
		Under-trial..	9	...	9	133	1	134	142	...	...
		Civil ...	1	...	1	6	...	6	7	...	...
Chittagong ...	District Jail	Convicts ...	215	5	220	492	43	535	707	...	...
		Under-trial..	12	1	13	480	49	529	492	...	...
		Civil ...	...	...	...	22	...	22	22	...	...
Cox's Bazar ...	Lock-up ...	Convicts ...	1	2	3	162	3	165	163	...	...
		Under-trial..	5	...	5	121	2	123	126	...	...
		Civil ...	...	...	...	3	...	3	3	...	...
Noakholly ...	District Jail	Convicts ...	209	5	214	750	8	758	959	...	...
		Under-trial..	31	...	31	443	4	447	474	...	...
		Civil ...	...	...	...	33	...	33	33	...	...
Fenny ...	Lock-up ...	Convicts ...	...	...	...	215	2	217	215	...	...
		Under-trial..	3	...	3	201	4	205	204	...	...
Patna ...	District Jail	Convicts ...	449	21	470	1,107	85	1,192	1,556	...	...
		Under-trial..	13	...	13	426	29	455	439	...	...
		Civil ...	2	...	2	49	3	52	51	...	...
	Minto's Hajut	Under-trial..	2	...	2	231	17	248	233	...	...

VISIONS—continued.

J M M A R Y—continued.

ified in the Jails and Lock-ups of Bengal during the year 1877.

7			8			8			10		
Discharged from all causes.			Remained at the end of the year 1877.			Daily average number of each class.			Total daily average of the whole jail.		
M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
122	4	126	6	...	6	160	0.02	1.62	470	0.03	473
167	3	170	5	...	5	310	0.01	3.11			
360	2	362	10	...	10	567	0.01	5.68	1487	0.18	1505
224	3	227	6	...	6	920	0.17	9.37			
406	8	1,014	505	7	512	47418	3.96	47814	511.09	5.92	517.01
425	15	440	57	2	59	3582	1.96	3778			
17	1	18	2	...	2	109	.....	1.09			
155	...	155	8	...	8	264	.....	2.64	1394	0.07	1401
187	3	190	11	...	11	1130	0.07	11.37			
141	1	142	4	...	4	215	0.01	2.16	907	0.01	969
128	...	128	2	...	2	752	.....	7.52			
100	3	103	3	...	3	0.97	0.01	0.98	677	0.02	679
209	4	213	5	...	5	580	0.01	5.81			
672	22	1,094	332	7	339	35330	7.26	36056	377.63	8.01	385.64
360	13	409	44	1	45	2141	0.75	2216			
36	...	36	5	...	5	292	.....	2.92			
191	1	192	8	...	8	480	0.04	4.81	930	0.08	958
101	2	103	3	...	3	470	0.04	4.74			
126	1	127	2	...	2	410	0.02	4.12	910	0.03	913
121	2	123	3	...	3	500	0.01	5.01			
222	5	227	17	...	17	570	0.10	5.80	1020	0.40	1060
133	6	139	1	...	1	450	0.30	4.80			
768	13	781	150	3	163	19291	4.89	19780	211.05	5.41	216.46
315	10	325	9	...	9	1406	0.52	1458			
38	...	38	5	...	5	408	.....	4.08			
198	4	202	.....	...	.....	430	0.04	4.34	810	0.04	814
140	1	141	2	...	2	370	.....	3.70			
6	...	6	1	...	1	010	.....	0.10			
472	35	507	235	13	248	18028	7.98	18826	200.96	9.20	210.16
475	48	523	17	2	19	1762	1.22	1884			
15	...	15	7	...	7	306	.....	3.06			
159	5	164	4	...	4	437	0.09	4.46	815	0.11	826
120	2	122	6	...	6	307	0.02	3.09			
1	...	1	2	...	2	071	.....	0.71			
848	13	861	111	...	111	11217	1.47	14364	173.54	1.59	175.13
106	4	470	8	...	8	2887	0.12	2899			
27	...	27	6	...	6	250	.....	2.50			
213	2	215	2	...	2	245	0.01	2.46	1090	0.06	1096
202	1	203	2	...	2	845	0.05	8.50			
222	82	1,304	334	24	358	40026	21.10	42136	418.47	22.18	440.65
424	29	453	15	...	15	1394	0.76	1470			
46	3	49	5	...	5	427	0.32	4.59			
33	17	250	.....	...	.....	081	0.05	0.86	0.81	0.05	0.86

C.

GENERAL

Showing the Distribution of the PRISONERS OF ALL CLASSES

1	2	3	4			5			6		
			Remained at the commencement of the year 1877.			Received during the year 1877.			Total.		
STATIONS.	Place of confinement.	Classes of prisoners.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Barrh ...	Lock-up ...	Convicts ... Under-trial...	2 11	...	2 11	171 176	8 5	179 181	173 187	8 5	181 192
Dinapore ...	Ditto ...	Convicts ... Under-trial...	...	...	...	151 165	30 26	181 191	151 165	30 26	181 191
Behar ...	Ditto ...	Convicts ... Under-trial...	1 2	...	1 2	248 223	14 9	262 232	249 225	14 9	263 234
Buxar ...	Central Jail...	Convicts ...	698	...	698	742	...	742	1,440	...	1,440
Gya ...	District Jail	Convicts ...	368	25	423	961	63	1,024	1,359	88	1,447
		Under-trial...	20	2	22	240	19	259	260	21	281
		Civil ...	3	...	3	31	...	31	34	...	34
Gya ...	Magte.'s <i>hajut</i>	Convicts ...	...	...	...	1	...	1	1	...	1
		Under-trial...	4	...	4	563	47	610	567	47	614
Nowada ...	Lock-up ...	Convicts ... Under-trial...	3 28	...	3 28	154 230	12 11	166 241	157 258	12 11	169 269
Jehanabad ...	Ditto ...	Convicts ... Under-trial...	2 10	...	2 12	142 262	8 6	150 268	144 272	8 8	152 280
Aurangabad ...	Ditto ...	Convicts ... Under-trial...	3 13	...	3 17	150 214	13 13	163 227	153 227	12 17	165 244
Shahabad ...	District Jail	Convicts ...	456	10	466	1,167	59	1,226	1,623	69	1,692
		Under-trial...	27	...	27	478	38	516	505	38	543
		Civil ...	3	...	3	32	...	32	35	...	35
Sasseram ...	Lock-up ...	Convicts ...	19	1	19	344	17	361	362	18	380
		Under-trial...	10	...	10	292	22	314	272	22	294
Buxar ...	Ditto ...	Convicts ...	6	...	6	350	15	365	356	15	371
		Under-trial...	14	...	14	207	6	213	231	6	237
Bhuboah ...	Ditto ...	Convicts ...	2	...	2	195	13	208	197	13	210
		Under-trial...	...	...	...	150	3	153	150	3	153
Mozufferpore	District Jail	Convicts ...	540	39	579	816	69	885	1,356	108	1,464
		Under-trial...	24	2	26	284	27	311	308	29	337
		Civil ...	7	...	7	45	...	45	52	...	52
Mozufferpore	Magte.'s <i>hajut</i>	Under-trial...	...	...	...	4	4	8	4	4	8
		Under-trial...	...	...	...	...	...	...	...	...	...
Hajepore ...	Lock-up ...	Convicts ...	1	...	1	246	35	281	247	35	282
		Under-trial...	5	...	5	157	24	181	162	24	186
Seetamurhee...	Ditto ...	Convicts ...	3	...	3	144	15	159	147	15	162
		Under-trial...	6	...	6	161	16	177	167	16	183
Durbhunga	District Jail...	Convicts ...	289	12	301	647	53	700	936	65	1,001
	Lock-up ...	Convicts ... Under-trial...	...	...	...	224 19	15 ...	239 325	224 344	15 17	239 361
Mudhoobunnee	Ditto ...	Convicts ...	1	...	1	128	20	148	229	20	249
		Under-trial...	8	...	8	286	18	304	294	18	312

REASONS—continued.

U M M A R Y—continued.

finished in the Jails and Lock-ups of Bengal during the year 1877.

7			8			9			10		
Discharged from all causes.			Remaining at the end of the year 1877.			Daily average number of each class.			Total daily average of the whole jail.		
M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
170	8	178	3	...	3	4.05	0.13	4.18	10.79	0.17	10.96
185	5	190	2	...	2	6.74	0.04	6.78			
151	30	181	...	...	...	0.40	0.08	0.48	2.50	0.18	2.68
160	26	186	5	...	5	2.10	0.10	2.20			
244	14	258	5	...	5	5.05	0.10	5.15	12.95	0.16	13.11
221	9	233	1	...	1	7.90	0.06	7.96			
614	...	614	826	...	826	708.00	...	708.00	708.00	...	708.00
1,042	70	1,112	317	18	335	354.41	19.53	373.94			
245	18	263	15	3	18	12.47	1.03	13.50	369.71	20.59	390.30
32	...	32	2	...	2	2.86	...	2.86			
...	...	...	1	...	1	1.00	...	1.00			
558	47	605	9	...	9	9.13	0.49	9.62	10.13	0.49	10.62
155	12	167	2	...	2	3.90	0.30	4.20	10.70	0.41	11.11
258	11	269	...	...	...	6.80	0.11	6.91			
142	8	150	2	...	2	3.25	0.07	3.32	11.86	0.28	12.14
261	7	268	11	1	12	8.41	0.21	8.62			
151	13	164	2	...	2	2.71	0.01	2.72	9.04	0.05	9.09
224	17	241	3	...	3	6.33	0.04	6.37			
1,397	58	1,455	226	11	237	344.87	13.91	358.78			
488	38	526	17	...	17	16.72	1.41	18.13	344.93	15.32	360.25
31	...	31	4	...	4	3.34	...	3.34			
350	18	368	12	...	12	10.15	0.35	10.50	15.98	0.78	16.76
257	22	279	15	...	15	5.83	0.43	6.26			
354	15	369	2	...	2	2.80	0.10	2.90	12.80	0.30	13.10
215	6	221	6	...	6	10.00	0.20	10.20			
190	11	201	7	2	9	7.50	0.44	7.94	13.20	0.80	14.00
147	3	150	3	...	3	5.70	0.36	6.06			
1,161	84	1,245	195	24	219	350.81	20.04	370.85			
298	27	325	10	2	12	14.30	2.82	17.12	375.04	22.86	397.90
45	...	45	7	...	7	9.93	...	9.93			
3	4	7	1	...	1	0.63	0.02	0.65	0.63	0.02	0.65
245	35	280	2	...	2	2.04	0.34	2.38	5.07	1.00	6.07
159	24	183	3	...	3	3.03	0.66	3.69			
146	15	161	1	...	1	2.88	0.30	3.18	6.69	0.62	7.31
161	16	177	6	...	6	3.81	0.32	4.13			
759	47	806	177	18	195	252.32	8.66	260.98	252.32	8.66	260.98
223	15	238	1	...	1	0.32	0.01	0.33	6.42	0.36	6.78
339	17	356	...	...	...	6.10	0.35	6.45			
228	20	248	1	...	1	2.10	0.13	2.23	13.40	0.70	14.10
294	18	312	...	...	...	11.30	0.57	11.87			

G E N E R

Showing the Distribution of the PRISONERS OF ALL CLAS

1	2	3	4			5			6		
STATIONS.	Place of confinement.	Classes of prisoners.	Remained at the commencement of the year 1877.			Received during the year 1877.			Total.		
			M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Tajpore	Lock-up	Convicts	11	...	11	190	12	202	190	12	202
		Under-trial	...	...	...	150	10	160	161	10	171
Sarun	District Jail	Convicts	311	22	333	657	35	692	968	57	1,025
		Under-trial	10	...	10	343	18	361	353	18	371
		Civil	3	...	3	7	...	7	10	...	10
Sewan	Lock-up	Convicts	6	...	6	503	26	529	509	26	535
		Under-trial	13	4	17	402	30	432	415	34	449
		Civil	...	...	...	1	...	1	1	...	1
Gopalgunge	Ditto	Convicts	3	...	3	78	4	82	81	4	85
		Under-trial	20	1	21	73	3	76	93	4	97
Chumparan	District Jail	Convicts	244	9	253	581	35	616	825	44	869
		Under-trial	38	1	42	406	19	425	444	23	467
		Civil	...	...	...	35	...	35	35	...	35
Bettiah	Lock-up	Convicts	4	...	4	238	17	255	242	17	259
		Under-trial	1	1	2	343	19	362	344	20	364
Monghyr	District Jail	Convicts	521	13	534	979	56	1,035	1,300	69	1,369
		Under-trial	18	3	21	502	25	527	520	28	548
		Civil	7	...	7	118	1	119	125	1	126
Jamocce	Lock-up	Convicts	4	...	4	324	10	334	329	10	339
		Under-trial	...	...	...	469	17	486	469	17	486
		Civil	...	...	...	7	1	8	7	1	8
Begoosera	Ditto	Convicts	2	...	2	163	16	179	165	16	181
		Under-trial	4	...	4	117	11	128	121	11	132
		Civil	1	...	1	18	...	18	19	...	19
Bhagulpore	District Jail	Convicts	236	20	256	806	10	816	1,012	30	1,042
		Under-trial	10	1	11	164	16	180	174	17	191
		Civil	17	...	17	53	2	55	110	2	112
	Central Jail	Convicts	859	...	859	731	60	791	1,590	60	1,650
		Under-trial	...	...	...	1	...	1	1	...	1
Banka	Lock-up	Convicts	2	...	2	119	3	122	121	3	124
		Under-trial	3	1	4	146	1	147	149	2	151
Sooopool	Ditto	Convicts	...	...	...	90	4	94	90	4	94
		Under-trial	...	...	...	110	3	113	140	3	143
Mudhloppoorah	Ditto	Convicts	2	...	2	85	6	91	87	6	93
		Under-trial	2	...	2	69	3	72	71	3	74
Purneah	District Jail	Convicts	332	11	343	561	13	574	893	24	917
		Under-trial	12	...	12	281	6	287	293	6	299
		Civil	3	...	3	31	...	31	33	...	33
Kissengunge	Lock-up	Convicts	1	...	1	105	2	107	106	2	108
		Under-trial	7	...	7	184	5	189	191	5	196
Arrarrah	Ditto	Convicts	1	...	1	119	4	123	120	4	124
		Under-trial	1	...	1	140	4	144	141	4	145

ISONS—continued.

M A R Y—continued.

defined in the Jails and Lock-ups of Bengal during the year 1877.

7			8			9			10		
Discharged from all causes.			Remainder at the end of the year 1877.			Daily average number of each class.			Total daily average of the whole jail.		
M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
157	12	169	3	...	3	2:38	0:07	2:45	5:07	0:24	0:21
157	10	167	4	...	4	3:39	0:17	3:56			
692	48	740	276	9	285	275:26	17:23	292:49	290:29	18:28	308:57
348	16	364	5	2	7	13:45	1:05	14:50			
10	...	10	...	...	...	1:58	...	1:58			
603	26	629	6	...	6	7:40	0:03	7:43			
406	34	440	9	...	9	10:30	0:07	10:37	17:73	0:10	17:83
1	...	1	...	...	...	0:03	...	0:03			
81	4	85	...	...	...	8:03	0:09	8:12	11:04	0:10	11:20
93	4	97	...	...	...	3:01	0:07	3:08			
620	36	656	205	8	213	210:38	7:60	217:98	234:96	9:81	244:77
440	22	462	4	1	5	20:79	2:21	23:00			
29	...	29	6	...	6	3:79	...	3:79			
240	17	257	2	...	2	7:10	0:40	7:50	17:70	1:00	18:70
334	20	354	10	...	10	10:60	0:60	11:20			
953	48	1,001	347	21	368	329:30	13:31	342:61	352:10	14:43	366:53
512	24	536	8	4	12	13:05	0:98	14:03			
118	1	119	7	...	7	9:75	0:14	9:89			
320	10	336	2	...	2	12:72	0:23	12:95	34:50	0:84	35:43
404	17	421	3	...	3	21:69	0:50	22:19			
7	1	8	...	...	...	0:18	0:01	0:19			
161	16	177	4	...	4	4:14	0:24	4:38	5:80	0:50	6:30
120	11	131	1	...	1	1:41	0:26	1:67			
18	...	18	1	...	1	0:34	...	0:34			
791	30	821	251	...	251	245:24	3:33	248:57	258:88	3:85	262:73
173	16	189	1	1	2	6:80	0:41	7:21			
94	2	96	16	...	16	6:84	0:11	6:95			
663	31	694	927	29	956	844:07	23:26	867:33	844:11	23:26	867:37
1	...	1	...	...	...	0:04	...	0:04			
120	3	123	1	...	1	1:59	0:01	1:60	4:34	0:02	4:36
147	2	149	2	...	2	2:75	0:01	2:76			
90	4	94	...	...	...	0:28	0:01	0:29	2:53	0:02	2:55
136	3	139	4	...	4	2:55	0:01	2:56			
82	6	88	5	...	5	1:74	0:02	1:76	2:65	0:03	2:68
65	3	68	6	...	6	0:91	0:01	0:92			
666	18	684	227	6	233	231:77	5:56	237:13	292:35	5:47	297:82
277	6	283	16	...	16	8:17	0:11	8:28			
32	...	32	1	...	1	2:41	...	2:41			
106	2	108	...	...	...	3:00	0:01	3:01	10:32	0:06	10:38
191	4	195	...	1	1	7:32	0:05	7:37			
117	4	121	3	...	3	1:80	0:02	1:82	6:40	0:03	6:43
136	4	140	5	...	5	4:60	0:01	4:61			

GENE

Showing the Distribution of the PRISONERS OF ALL CL.

1	2	3	4			5			6		
STATIONS.	Place of confinement.	Classes of prisoners.	Remained at the commencement of the year 1877.			Received during the year 1877.			Total.		
			M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Nya Doomka. } Sonthal Pgs. }	Lock-up ...	Convicts ... Under-trial ...	52 16	5 ...	57 10	224 248	30 16	254 264	276 258	35 16	
Rajmehal ...	Ditto ...	Convicts ... Under-trial ...	7 19	... ...	7 19	156 177	6 10	162 187	163 196	6 10	
Deoghur ...	Ditto ...	Convicts ... Under-trial ...	15 1	... 1	15 2	261 140	17 5	278 145	273 141	17 6	
Jamtara ...	Ditto ...	Convicts ... Under-trial ...	... 7	... 1	... 8	21 79	1 1	22 80	21 86	1 2	
Podda ...	Ditto ...	Convicts ... Under-trial ...	11 5	1 ...	12 5	156 190	1 ...	151 190	161 195	2 ...	
Pakour ...	Ditto ...	Convicts ... Under-trial ... Civil ...	5 ... ...	... ... ...	5	158 178	33 34	191 212	163 179	33 34	
Cuttack ...	District Jail	Convicts ... Under-trial ... Civil ...	260 11 4	11 1 ...	271 12 4	563 334 59	28 24 ...	591 358 59	823 345 63	39 25 ...	
Jajpore ...	Lock-up ...	Convicts ... Under-trial ... Civil ...	... 18 ...	... 2 ...	... 20 ...	197 168 2	11 9 ...	118 117 2	107 126 2	11 11 ...	
Kendrapara ...	Ditto ...	Convicts ... Under-trial ... Civil ...	2 ... ...	... ... ...	2	131 108 1	6 4 ...	140 112 1	136 108 1	6	
Pooree ...	District Jail	Convicts ... Under-trial ... Civil ...	79 1 ...	2 1 ...	81 2 ...	362 611 3	6 23 ...	368 634 3	411 612 3	8 21 ...	
Khoordah ...	Lock-up ...	Convicts ... Under-trial ... Civil ...	1 2 1	... ... ...	1 2 1	140 102 18	2 3 ...	142 105 18	141 104 19	2 3 ...	
Balasore ...	District Jail	Convicts ... Under-trial ... Civil ...	101 1 ...	41	112 1 ...	326 285 1	21 23 ...	347 309 1	427 286 1	32 24 ...	
Bhuddruck ...	Lock-up ...	Convicts ... Under-trial ...	... 3	... ...	... 3	127 96	6 7	133 103	127 99	6 7	
Hazareebagh	European Penitentiary.	Convicts ... State prisoners.	55 2	... ...	55 2	36 ...	...	36 ...	91 2	...	
		Convicts ... Under-trial ... Civil ...	917 1 1	8	925 1 1	715 183 5	31 11 ...	746 196 5	1,632 186 6	39 11 ...	
	District and Central Jail.	Convicts ... Under-trial ... Civil ...	4 7 1	... ... ...	4 7 1	181 164 ...	4 4 ...	185 168 ...	185 171 1	4 4 ...	
Pachumba ...	Lock up ...	Convicts ... Under-trial ... Civil ...	... ... ...	... ... ...	... ... ...	... ... ...	... ... ...	... ... ...	... ... ...	... ... ...
Lohardugga ...	District Jail	Convicts ... Under-trial ... Civil ...	188 17 3	7 1 ...	195 18 3	618 368 7	57 14 ...	675 382 7	808 385 10	64 15 ...	

isons—continued.

Summary—continued.

ained in the Jails and Lock-ups of Bengal during the year 1877.

7			8			9			10		
Discharged from all causes.			Remaining at the end of the year 1877.			Daily average number of each class.			Total daily average of the whole jail.		
M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
268	35	303	8	...	8	1272	072	1344	2635	096	2731
240	16	256	18	...	18	1363	024	1387			
161	6	167	2	...	2	345	009	354	1040	033	1073
194	10	204	2	...	2	695	024	719			
268	17	285	8	...	8	1174	052	1226	1512	064	1576
141	6	147	...	...	...	338	012	350			
21	1	22	...	...	...	250	001	251	680	001	681
81	2	83	5	...	5	430	...	430			
187	2	189	4	...	4	843	602	845	1658	002	1660
194	...	194	1	...	1	815	...	815			
161	32	193	2	1	3	698	...	698	1300	No data.	1300
176	33	209	2	1	3	602	...	602			
...			
598	30	628	225	9	234	21006	709	21715	22822	795	23617
332	25	357	13	...	13	1107	086	1193			
51	...	51	12	...	12	709	...	709			
97	11	108	10	...	10	250	036	286	505	048	553
123	11	134	3	...	3	250	012	262			
2	...	2	...	...	...	005	...	005			
135	6	141	1	...	1	202	003	205	414	008	422
108	4	110	2	...	2	211	005	216			
1	...	1	...	...	...	001	...	001			
374	4	378	67	4	71	7762	122	7884	8840	160	9000
600	22	622	12	2	14	1023	038	1061			
3	...	3	...	...	...	055	...	055			
138	2	140	3	...	3	407	004	411	767	013	780
104	3	107	...	...	...	826	009	835			
18	...	18	1	...	1	034	...	034			
371	32	403	54	...	56	9758	350	10108	10800	459	11259
272	22	294	14	2	16	1030	109	1139			
1	...	1	...	...	...	012	...	012			
124	6	130	3	...	3	095	001	096	235	008	243
99	7	106	...	...	...	140	007	147			
20	...	20	71	...	71	6552	...	6552	6752	...	6752
...	...	...	2	...	2	200	...	200			
844	28	872	798	11	799	76550	1033	77583	77087	1061	78148
173	10	183	13	1	14	503	028	531			
6	...	6	...	...	...	025	...	025			
177	4	181	8	...	8	833	005	838	1365	016	1381
163	4	167	8	...	8	529	011	540			
1	...	1	...	...	...	003	...	003			
619	61	710	157	3	160	18172	585	18757	20093	609	20602
383	15	398	2	...	2	1885	024	1913			
10	...	10	...	...	...	032	...	032			

GENERAL

Showing the Distribution of the PRISONERS OF ALL CLASSES

1	2	3	4			5			6	
STATIONS.	Place of confinement.	Classes of prisoners.	Remained at the commencement of the year 1877.			Received during the year 1877.			Total.	
			M.	F.	Total.	M.	F.	Total.	M.	F.
Palamow ...	Lock-up ...	Convicts ...	7	...	7	157	8	165	164	8
		Under-trial..	15	1	16	210	8	218	225	9
Singbhoom ...	District Jail	Convicts ...	71	3	74	163	6	169	234	9
		Under-trial..	8	...	8	104	4	108	112	4
		Civil ...	.....	...	...	1	...	1	1	.....
Manbhoom ...	District Jail	Convicts ...	192	6	198	515	18	533	707	24
		Under-trial..	16	...	16	489	18	507	605	18
		Civil ...	4	...	4	27	1	28	31	1
G. indpore ...	Lock-up ...	Convicts ...	11	...	11	89	1	90	100	1
		Under-trial..	2	...	2	87	4	91	89	4
Total ...			19,176	674	19,850	52,151	2,829	54,980	71,327	3,503
		Under-trial..	1,181	78	1,259	31,233	1,633	32,866	32,414	1,771
		Civil ...	153	2	155	1,698	53	1,749	1,849	55
		State prisoners.	2†	...	2	.....	...	.....	2	.....
GRAND TOTAL			20,512	754	21,266	85,080	4,575	89,655	105,592	5,329

NOTE.—Column 5 includes the total of columns 4 and 5 in the Hazar

DISCHARGES—continued.

JANUARY—concluded.

Confined in the Jails and Lock-ups of Bengal during the year 1877.

7			8			9			10		
Discharged from all causes.			Remaining at the end of the year 1877.			Daily average number of each class.			Total daily average of the whole jail.		
M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
150	8	158	14	...	14	15'32	0'37	15'69	24'02	0'55	25'17
202	9	211	23	...	23	9'30	0'18	9'48			
174	9	183	60	...	60	66'22	2'01	68'13			
108	4	112	4	...	4	5'44	0'26	5'70	71'74	3'17	74'91
1	...	1	.....	...	.....	0'03	.....	0'03			
608	19	627	90	5	104	124'63	4'43	129'06			
497	18	515	8	...	8	19'30	0'06	20'26	145'03	5'30	151'32
27	...	27	4	1	5	2'00	.....	2'00			
98	1	99	2	...	2	4'20	0'01	4'21	5'80	0'11	5'91
88	4	92	1	...	1	1'00	0'10	1'10			
1,867	2,024	3,891	16,460	579	17,039	16,961'89	565'45	17,527'34	18,233'93	621'39	18,855'32
1,528	1,715	3,243	886	56	942	1,128'94	53'37	1,182'31			
1,651	53	1,704	168	2	170	141'10	2'57	143'67			
.....	...	.....	2	...	2	2'00	.....	2'00			
8,076	4,692	12,768	17,516	637	18,153	18,233'93	621'39	18,855'32	18,233'93	621'39	18,855'32

statement No. 1, and column 4 of statements Nos. 20 and 21.
European Penitentiary.

C.—PRISONS—*continued.*STATEMENT No. I—(Judicial)—*concluded.*

	10		11		12		13		14			15			16		
	Transferred to lunatic asylums.		Escaped.		Executed.		Died.		Total discharged from all causes, as per columns 8 to 14.			Remained on the 31st December 1877.			Daily average number or mean population of jails and lock-ups.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Total ...	12	.....	20*	.....	56	4	840†	23	54,867	2,921	57,791	16,400	579	17,000	16,861	565	17,527

* Excluding 32 male and 2 female convicts who escaped and were recaptured during 1877.

† Including 1 death by suicide.

C.—PRISONS—continued.

STATEMENT No. II.—(Judicial)

Showing the Religion, Age, and Previous Occupation of the CONVICTS in the Jails of Bengal during the year 1877.

LXIV

BENGAL ADMINISTRATION REPORT.

1		2										3											
		RELIGION.										AGE.											
		A.			B.		C.		D.		E.		A.		B.		C.		D.				
		CHRISTIANS.						Mahomedans.		Hindoos.		Buddhists and Jains.		All other classes.		Under 16 years of age.		16 and under 40 years.		40 and under 60 years.		60 years and above.	
		a	b	c																			
		Europeans.		Eurasians.	Natives.																		
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total	...	856	10	116	1	112	9	15,867	740	23,147	1,356	229	18	1,641	129	509	76	36,005	1,651	10,115	406	1,049	63

N.B.—The figures relating to jails in this and subsequent judicial statements include prisoners transferred from lock-ups to district jails for confinement, but not those who served out their sentences in lock-ups, or prisoners re-aptured who escaped during the year under report.

STATEMENT No. II.—(Judicial)—continued

4										5		
PREVIOUS OCCUPATION.												
MALES.						FEMALES.				TOTAL.		
A.	B.	C.	D.	E.	F.	G.	H.	I.	J.			
Of independent property.	Agri-culturists.	Non-agri-culturists.	Domestic servants.	Government servants.	No occupation.	Married.	Unmarried.	Widows.	Prostitutes.			
Total.	671	31,011	33,292	2,238	1,228	2,238	2,238	2,238	2,238	671	31,011	33,292

[1877]

STATEMENT No. III—(Judicial.)

Showing the Convicts in the Jails of Bengal for the year 1877 according to the Nature and Length of Sentence.

1	2										3	4															
CLASS ACCORDING TO THE LENGTH OF SENTENCE.										NATURE OF IMPRISONMENT.																	
A.	B.		C.		D.		E.		F.		G.	H.		I.	A.	B.											
Not exceeding one month.	Above 1 month and not exceeding 6 months.		Above 6 months and not exceeding 1 year.		Above 1 year and not exceeding 3 years.		Above 3 years and not exceeding 5 years.		Above 5 years and not exceeding 10 years.		Exceeding 10 years.	Sentenced to transportation beyond seas.		Sentenced to death.	Simple imprisonment.	Rigorous imprisonment.*											
												For life	For term.														
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.									
Total ...	7,769	543	15,687	935	8,418	335	9,249	279	2,251	53	2,942	39	366	3	451	49	550	1	71	4	1,425	305	46,343	1,951	47,768	2,236	50,024

* Including prisoners sentenced to transportation and to death.

STATEMENT No. IV—(Judicial.)

Showing the Convicts in the Jails of Bengal during the year 1877 who had been previously convicted.

1			2			3												4			5			
Total.			NUMBER OF PREVIOUS CONVICTIONS.												Ratio of column 3 D to column 2.			JUVENILE PRISONERS (UNDER 16 YEARS OF AGE, SECTION 314, PENAL CODE).						
			A.		B.		C.		D.															
			Once.	Twice.	More than twice.	Total.																		
M.	F.	Total.	M.	F.	M.	F.	M.	F.	M.	F.	Total.	M.	F.	Total.	M.	F.	M.	F.						
Total ...	47,768	2,236	50,024	4,350	98	1,447	27	1,298	21	7,605	149	7,244	1435	660	1448	400	53	92	2					

C.—PRISONS—continued.

STATEMENT No. V.—(Judicial.)

Showing Escapes and Recaptures of Convicts in the Jails and Lock-ups of Bengal during the year 1877.

1	2	3			4			5			6			
	Remain- uncaptured on the 31st December 1876 of those who escaped during the previous ten years.	ESCAPED DURING THE YEAR.			RECAPTURED DURING THE YEAR.			REMAINED UNCAPTURED.			UNEXPIRED PORTION OF SENTENCE OF THOSE WHO ESCAPED DURING THE YEAR.			
		A.	B.	C.	A.	B.	C.	A.	B.	C.	A.	B.	C.	D.
		From inside the Jail.	From out- side the Jail.	Total.	Of those who escaped in previous ten years.	Of those who escaped during the year.	Total.	Of previous years.	Of the year 1877.	Total.	Under 1 year.	1 and under 7 years.	7 and above.	Remaining portion of life.
TOTAL	537	63	10	73	12	53	65	34	20	365	27	33	7	1

Showing the Offences committed by the CONVICTS, and the Punishments inflicted on them, in the Jails of Bengal during the year 1877.

1	2	3	4										5	6								
Average number of convicts.	Criminal offences.	Smoking, or having forbidden articles in possession.	Offences relating to work.	Other offences against discipline.	BREACHES OF JAIL RULES.										PUNISHMENTS INFLICTED.	Ratio of column 5C to column 2.						
					A.												B. By Jail Officers.	C.				
					By Criminal Courts.																	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Solitary confinement.		Reduced diet.		Solitary confinement with reduced diet.		Corporal punishment.		Other punishments.		Total punishment.
16,1501	55728	273	4	2,837	22	19,301	403	7,220	170	69	...	1,141	31	1,277	144	1,987	146	3,013	10,065	80	27,213	12354

The difference between the totals of the figures in columns 4 and 5 represents the number of times warning was given in respect of offences committed.

C.—Prisons—continued.

STATEMENT No. VII.—(Judicial.)

Showing the state of Education of the Convicts imprisoned in, and released from, the Jails of Bengal during the year 1877.

1	2		3			4	5		6		7		8																	
Number imprisoned during the year 1877.	OF THOSE IN COLUMN 3 THERE WERE			Daily average number of convicts.	Daily average number under instruction.	Number released during the year.	OF THOSE IN COLUMN 6 THERE WERE			NUMBER RELEASED DURING THE YEAR AFTER MORE THAN SIX MONTHS IN JAIL.																				
	Unable to read and write.	Able to read and write a little.	Able to read and write well.				Unable to read and write.	Able to read and write a little.	Able to read and write well.	Unable to read and write.	Able to read and write a little.	Able to read and write well.																		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.													
Total	23,887	1,303	24,668	1,583	3,060	10	1,159	...	16,313	01	333	28	876	33	10	64	30,297	1,652	25,352	1,630	3,421	12	1,324	1	10,342	428	1,211	10	607	1

STATEMENT No. VIII.—(Judicial.)

Showing the Employment of Convicts as Prison Officers in the Jails of Bengal during the year 1877.

1	2	3	4	5	6
	Average number of prisoners of all classes.	Total number employed as prison officers.	Average number employed.	Ratio of column 4 to column 2.	Number reduced or otherwise punished.
	M. F.	M. F.	M. F.	M. F.	M. F.

STATEMENT No. X—(Financial.)

Showing the Expenditure in guarding and maintaining the PRISONERS in the Jails of Bengal during the year 1877, excluding the Cost of Building New Jails, and of Additions, Alterations, or Repairs.

1	2				3		4		5	
	AVERAGE NUMBER OF PRISONERS.				RATIONS.		ESTABLISHMENT.		POLICE GUARD.	
					A.	B.	A.	B.	A.	B.
	Convicts.	Under-trial.	Civil.	Total.	Total cost.	Cost per head of average strength, excluding civil prisoners.	Total cost.	Cost per head of average strength.	Total.	Cost per head of average strength.
					Rs.	Rs. A. P.	Rs.	Rs. A. P.	Rs.	Rs. A. P.
Total	17,179-29	712-41	137-13	18,029-83	5,02,630	28 1 7	2,91,131	15 2 5	1,31,771	7 4 11

STATEMENT No. X—(Financial)—concluded.

	6			7		8		9	
	HOSPITAL CHARGES.			CLOTHING.		CONTINGENCIES.		Grand total expended.	Total cost per head of average strength
	A.	B.	C.	A.	B.	A.	B.		
	Total cost.	Cost per head of average strength.	Cost per head of average number sick.	Total cost.	Cost per head of average strength.	Total cost.	Cost per head of average strength.		
	Rs.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs.	Rs. A. P.	Rs.	Rs. A. P.
Total	29,799	1 10 5	41 15 6	55,160	3 4 0	77,553	4 4 10	10,91,074	60 8 7

C.—PRISONS—continued.

STATEMENT No. XI—(Financial.)

Showing the Expenditure in Guarding and Maintaining the PRISONERS in the Jails and Lock-ups of Bengal during the year 1877 (excluding Cost of Building New Jails, of Additions, Alterations, and Repairs), compared with the expenditure on the same account of the three preceding years.

1	2				3				4				5				6				7																																																																																																																																																																																		
Cost of rations per head of average strength.								Cost of establishment and police guard per head of average strength.								Cost of hospital charge per head of average strength.								Cost of clothing per head of average strength.								Cost of contingencies per head of average strength.								Total cost per head of average strength.																																																																																																																																																															
1874.								1875.								1876.								1877.								1874.								1875.								1876.								1877.																																																																																																																																															
Rs. A.								Rs. A.								Rs. A.								Rs. A.								Rs. A.								Rs. A.								Rs. A.								Rs. A.																																																																																																																																															
Total ...								31 7								26 6								26 1								28 7								29 7								21 14								22 3								35 11								1 7								1 9								1 10								1 9								3 1								3 7								2 14								3 2								3 6								3 5								3 8								4 9								39 10								36 8								55 13								63 4							

STATEMENT No. XII—(Financial.)

Showing the Employment of the CONVICTS in the Jails and Lock-ups of Bengal during the year 1877.

1	2	3	4	5						6				
Average number sentenced to labour.	Average number not sentenced to labour.		Average number of effectives.		Employment.						Ratio per cent. on column 4 of those employed.			
					A.	B.	C.	D.	E.	F.				
					Prison officers.	Prison servants.	Building and repairing jails.	On jail gardens.	On manufactures.	Extramural.		As prison officers.	As prison servants.	On manufactures.
M.	F.	M.	F.	M.	F.									
Total	17,420 12	206 79	15,876 58	813 79	2,725 59	2,925 35	1,116 33	3,100 45	86 06	312	17 16	57 37		

C. - PRISONS—continued.

STATEMENT No. XIII—(Financial.)

Showing the results of the Employment of the CONVICTS in the Jails in the Lower Provinces of Bengal during the year 1877.

1	2						3		
	CREDITS.						DEBITS.		
	A.	B.	C.	D.	E.	F.	A.	B.	C.
	Cash received for labour or articles sold during the year.	Value of manufactured goods supplied for Government purposes.	Value of manufactured goods remaining in store.	Value of raw materials in store.	Value of plant and machinery.	Total credits.	Value of manufactured goods in store on the 1st January 1877.	Value of raw materials in store on the 1st January 1877.	Value of plant and machinery in store on the 1st January 1877.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Total ...	5,91,002	2,54,716	1,73,371	53,984	1,07,465	11,95,435	1,18,261	59,972	1,04,186

STATEMENT No. XIII—(Financial)—concluded.

			4	5			6		
DEBITS—concluded.									
D.	E.								
Cash expended on raw materials, plant, &c., during the year.	Total debits.		Excess of credits or profits.	Average profit per head of effectives.	Excess of debits or loss.	Excess of 2A over 3D, or cash profit.	Average cash profit per head of effectives.	Excess of 3D over 2A, or cash loss.	Amount of out-standing bills due to jails.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Total ...	6,11,636	9,24,114	2,71,324	174	.....	.....	.....	20,634	83,128

NOTE—The average profit per head of effectives has been calculated after deducting the average number of prisoners employed in the Alipore Jail Press.

C.—PRISONS—continued.

STATEMENT No. XIV—(Financial.)

Showing the Expenditure on Constructing New Jails, and on Additions, Alterations, and Repairs, with the Gross and Net Cost of the PRISONERS in the Jails of Bengal during the year 1877.

1	2		3	4	5	6	7	8	9	10
	ON JAIL BUILDINGS.									
	A.	B.	On maintain- ing and guard- ing the pri- soners.	Total expendi- ture, columns 2 and 3.	Expenditure on manufac- tures, column 5 of state- ment No. XIII.	Gross expendi- ture, columns 4 and 5.	Cash receipts from manufac- tures, columns 2A and B of statement No. XIII.	Net cost, or column 6 minus column 7.	Total expendi- ture (col- umn 4) per head of average strength.	Net cost per head of average strength.
	By Jail Depart- ment.	By Public Works Depart- ment.								
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs. A.	Rs. A.
Total ...	21,026	1,20,223	11,92,606	13,30,234	6,11,858	16,91,920	9,75,115	11,16,302	73 3	59 3

STATEMENT No. XV—(Vital)

Showing the Sickness and Mortality among the CONVICTS in the Jails of Bengal during the year 1877.

1	2			3			4			5			6		
	Capacity of the convict wards at 96 superficial and 500 cubic feet per head.			Daily average number of convicts in jail.			Maximum number of convicts in the convict wards on any one day.			Number admitted into hospital.			Daily average number of sick.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Total ...	19,168	1,198	20,366	16,615	901	17,516	18,200	890	19,090	22,800	666	23,466	665	2917	6946

STATEMENT No. XV—(Vital)—concluded.

7				8															
Number of deaths in and out of hospital.				A.			B.			C.			D.			E.			
				Ratio per cent. of average strength.															
				Of admissions into hospital.			Of daily average number of sick.			Of deaths from cholera.			Of deaths from all other causes both in and out of hospital.			Of deaths from all causes both in and out of hospital.			
M. F. Total.				M. F. Total.			M. F. Total.			M. F. Total.			M. F. Total.			M. F. Total.			
Total	...	843	26	869	13175	13595	13543	399	525	463	683	651	683	121	111	123	507	468	509

C.—PRISONS—continued.

STATEMENT No. XVI—(Vital.)

Showing the Admissions and Deaths from the Chief Diseases among the Convicts in the Jails of Bengal during the year 1877.

1	2													
	A.		B.		C.		D.		E.		F.		G.	
	Small-pox.		Intermittent fever.		Remittent and continued fever.		Cholera.		Scrofula and phthisis pulmonalis.		Anæmia and general debility.		Respiratory diseases.	
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Total	17	1	6982	37	1205	59	335	142	212	70	582	77	732	89

STATEMENT No. XVI—(Vital)—concluded.

		2						3							
		H.		I.		J.		RATIO OF ADMISSIONS AND DEATHS PER CENT. OF AVERAGE STRENGTH FROM							
		Dysentery and diarrhoea.		Jaundice.		Ulcers and boils.		Intermittent fever.		Remittent and con- tinued fever.		Cholera.		Dysentery and diarrhoea.	
		A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Total	...	7151	292	102	2	536	1	4966	621	791	629	195	683	4164	170

STATEMENT No. XVII—(Vital.)

Showing the Sickness and Mortality among UNDER-TRIAL, CONVICTED, and CIVIL PRISONERS severally, and the Mortality from Fevers, Bowel Complaints, and Cholera in each Class of Prisoners in the Jails of Bengal during the year 1877.

1	2						3					
	AVERAGE POPULATION.						DAILY AVERAGE SICK.					
	Under-trial.		Convicted.		Civil.		Under-trial.		Convicted.		Civil.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total	6725	3659	1642501	65528	13506	207	1250	245	62530	2917	649	645

STATEMENT No. XVII—(Vital)—concluded.

4		5				6				7				8										
TOTAL DEATHS IN AND OUT OF HOSPITAL.				DEATHS FROM FEVERS.				DEATHS FROM BOWEL COMPLAINTS.				DEATHS FROM CHOLERA.												
Under-trial.		Convicted.		Civil.		Under-trial.		Convicted.		Civil.		Under-trial.		Convicted.		Civil.								
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.							
Total	20	1	843	26	1	...	2	1	85	2	1	...	5	...	299	13	6	...	139	3

C.—PRISONS—continued.

STATEMENT No. XVIII.—(Vital.)

Showing the Mortality, according to Age, among the CONVICTS in the Jails of Bengal during the year 1877.

1	2						3					
	UNDER 16 YEARS.						16 TO 40 YEARS.					
	Average number.		Deaths.		Ratio of deaths per cent. of average number.		Average number.		Deaths.		Ratio of deaths per cent. of average number.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total ...	17371	1834	2	3	113	1635	12,37523	30204	491	6	391	162

STATEMENT No. XVIII.—(Vital)—concluded.

	4						5						6					
	40 TO 60 YEARS.						OVER 60 YEARS.						TOTAL.					
	Average number.		Deaths.		Ratio of deaths per cent. of average number.		Average number.		Deaths.		Ratio of deaths per cent. of average number.		Average number.		Deaths.		Ratio of deaths per cent. of average number.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total ...	3,57151	15505	300	14	817	902	12014	1416	60	3	1000	2118	16,61671	55039	843	90	507	468

C.—PRISONS—continued.
STATEMENT No. XIX—(Trial)

Showing the Mortality among the Convicts in the Jails of Bengal during the year 1877 according to Length of Imprisonment.

1	2	3	4	5	6	7												
UNDER 6 MONTHS IN JAIL.			FROM 6 TO 12 MONTHS.		FROM 1 TO 2 YEARS.		FROM 2 TO 3 YEARS.		FROM 3 TO 7 YEARS.		ABOVE 7 YEARS.							
Total ...	Average number.	Deaths.	Ratio of deaths per cent. of average number.	Average number.	Deaths.	Ratio of deaths per cent. of average number.	Average number.	Deaths.	Ratio of deaths per cent. of average number.	Average number.	Deaths.	Ratio of deaths per cent. of average number.						
	4,336-49	157	3-73	3,154-03	201	6-37	2,075-53	174	6-50	1,011-02	83	4-34	2,803-85	173	6-16	1,080-45	51	4-79

C.—PRISONS—continued.

STATEMENT No. XX.

Showing particulars regarding CIVIL PRISONERS in the Jails and Lock-ups of Bengal during the year 1877.

1	2		3		4		5		6		7		8		9		10		
	Number remaining at close of previous year.		Number received during the year		Total population.		Daily average number.		Released during the year.		Escaped.		Transferred.		Died.		Remaining on 31st December 1877.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	F.		
Total	153	2	1,606	53	1,849	55	111	10	237	1,665	50	15	3	1	168	2

STATEMENT No. XX—concluded.

11		12		13		14								15					
Capacity of barracks at 36 superficial feet per head.		Average number of prisoners above capacity.		Average number of prisoners below capacity.		HOSPITAL.								Cost.					
						A.		B.		C.		D.		A.	B.				
						Admissions.	Daily average sick.	Deaths.	Ratio of deaths per cent. of average strength.	Total charges.	Average cost per prisoner.								
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Rs. A. P.	Rs. A. P.				
Total	611	11	427	8	13	30	1	0	31	0	5	1	...	0	71

STATEMENT No. XXI.

Showing particulars regarding PRISONERS UNDER TRIAL in the Jails and Lock-ups of Bengal during the year 1877.

1	2		3		4			5			6			7			8		
	Number remaining at close of previous year.		Number received.		Total population.			Average daily number.			Released.			Convicted and sentenced.			Transferred.		
	M.	F.	M.	F.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Total ...	1,181	78	31,333	1,603	32,414	1,771	34,185	1,125	94	43	1,182	31	13,355	639	14,044	15,268	869	16,101	2,826
																	160		2,086

STATEMENT No. XXI—concluded.

9			10			11			12					13			
Escaped.			Died.			Remainder on 31st December 1877.			Cost.					HOSPITAL.			
									A.	B.	C.	D.	E.	A.	B.	C.	D.
									Rations.	Guard and establishment.	Other charges.	Total.	Annual cost per head of average strength.	Admissions.	Daily average sick.	Deaths.	Ratio of deaths per cent. of average strength.
M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	Rs.	Rs.	Rs.	Rs.	Rs. A. P.				
Total ...	15	...	15	34	37	889	56	942	10,767	19,252	4,352	43,371	6 14 0	922	2365	37	313

C.—PRISONS—continued.

STATEMENT No. XXII.

Showing the Expenditure on Guarding and Maintenance, and Hospital Statistics, of the CONVICTED, UNDER-TRIAL, AND CIVIL PRISONERS in the Lock-ups of Bengal during the year 1877.

	Total daily average number of prisoners of all classes.	EXPENDITURE.										Average cost per head.
		Rations.	Clothing.	Hospital charges, medicines, &c.	Paid lock-up servants, native doctor.	Paid lock-up servants, warders.	Petty repairs.	Contingencies, including transfer charges, lighting, &c.	Total.	Police guard.	Grand total.	
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Total ...	868 47	30,066 7 5	273 4 10	321 0 11	19,022 5 4	15,006 13 6	5,537 9 9	8,512 0 11	73,636 10 8	29,033 15 0	1,07,120 9 8	123 4 7

STATEMENT No. XXII—concluded.

HOSPITAL STATISTICS.														
Number of admissions into hospital.				Daily average number of sick.				Number of deaths.			Ratio of deaths per cent. of average strength.			
Civil.	Under-trial.	Convicted.	Total.	Civil.	Under-trial.	Convicted.	Total.	Under-trial.	Convicted.	Total.	Under-trial.	Convicted.	Total.	
Total ...	15	455	718	1,213	612	899	1170	2191	15	8	33	319	226	270

STATISTICAL RETURN

- Including prisoners sentenced to transportation and to death.

STATEMENT NO. XXV.

Statistics of Mortality in Jails and Lock-ups of Bengal grouped geographically

		STATISTICS OF 1877.														
		NUMBER OF DEATHS FROM														
		Cholera.	Dysentery.	Diarrhoea.	Fever.	Pulmonary diseases.	Daily average in jail of all classes.	Percentage of daily average sick.	Number of deaths.	Death-rate.	Death-rate of 1876.	Average mortality per cent. for the five years 1857-61.	Average mortality per cent. for the five years 1862-66.	Average mortality per cent. for the five years 1867-71.	Average mortality per cent. for the five years 1872-76.	Average mortality per cent. for the 20 years 1857-76.
NORTH B-HAH	Mountferrone	7	8	3	2	1	368	1.87	30	7.54	8.47	9.15	9.56	8.67	9.97	9.39
	Durbhanga	2	10	...	...	...	261	0.69	6	2.20	8.44	13.17	11.92	4.97	5.53	5.33
	Serun	6	4	3	...	4	285	3.23	32	7.11	10.97	10.97	7.57	4.81	6.61	8.90
	Chumprun	13	...	...	...	...	246	2.47	37	16.10	18.91	9.37	7.87	5.84	13.39	8.98
	Total	28	22	7	4	8	1,213	2.40	95	7.88	10.27	11.03	9.31	6.65	8.98	9.22
SOUTH B-HAH	Shahabad	1	1	...	...	2	380	1.04	6	1.57	6.94	15.41	7.32	2.62	6.76	7.42
	Gya	3	3	...	...	3	390	4.08	13	4.61	9.86	19.87	7.74	6.41	11.33	11.38
	Patna	10	...	...	...	3	441	1.99	34	7.71	9.03	10.47	7.24	6.69	6.29	8.97
	Monohar	1	2	4	1	1	367	2.31	13	3.54	1.56	16.31	15.60	3.74	8.27	10.43
	Bharnipore	4	...	...	...	2	267	2.19	11	4.13	3.51	18.43	9.44	4.27	7.04	10.47
SANTHALISTAN	Buxar—Central Jail	1	4	6	6	2	867	2.89	6	3.42	3.34	13.14	5.93	7.15	5.35	6.10
	District Jail	23	...	...	...	...	785	2.01	47	0.84	3.36	...	...	...	...	...
	Central Jail	1	...	...	...	...	785	2.01	47	0.84	3.36	...	...	...	...	...
	Total	45	19	17	15	11	3,416	2.53	135	3.95	4.99	15.33	9.16	5.42	6.15	8.78
	Bankoora	1	...	...	...	...	139	1.08	2	1.44	3.00	7.15	5.66	1.15	2.33	4.23
CHOTA NAGPORE.	Beerbhoom	...	...	...	...	2	233	5.50	4	1.71	1.29	7.19	3.07	3.55	4.35	4.76
	Total	...	1	...	1	2	372	3.85	6	1.61	2.25	7.13	4.63	2.03	3.66	4.46
	Hasarobhagh—District and Central Jail.	...	...	...	...	...	751	6.21	53	6.75	11.68	13.85	7.70	7.41	4.39	25.99
	Lohandura	8	10	9	...	9	297	1.33	53	0.96	10.97	13.85	7.70	7.41	4.39	25.99
	Manbhoom	2	2	...	...	1	151	2.87	5	3.31	7.03	10.30	4.09	3.40	4.33	6.69
CHOTA NAGPORE.	Singbhoom	...	...	...	...	...	75	7.46	8	10.96	10.10	13.14	20.99	4.23	7.12	13.34
	Total	14	12	12	10	10	1,314	5.14	68	5.90	10.77	14.43	8.51	4.31	4.99	10.42

[illegible]

STATEMENT NO. XXV—concluded.

Statistics of Mortality in Jails and Lock-ups of Bengal grouped geographically—concluded.

		STATISTICS OF 1877.									
		NUMBER OF DEATHS FROM									
		Cholera.	Dysentery.	Diarrhoea.	Fever.	Pulmonary diseases.	Daily average in jail of all classes.	Percentage of daily average sick.	Number of deaths.	Death-rate.	Death-rate of 1876.
EUROPEAN PRISONERS AT THE ALIPORE PRESIDENCY AND HAZAREEBAGH.	Presidency	1	...	...	...	...	68	6.53	1	1.47	...
	Hazareebagh.	...	1	...	...	...	66	8.58	...	3.08	1.45
Total		1	1	...	1	...	135	5.34	3	2.22	0.69
Total for Jails		148	198	99	91	154	17,962	3.95	801	4.96	5.89
Total for Magistrates' Hájats		...	...	...	...	...	61	...	1	1.64	...
Total for Lock-ups		3	4	...	7	2	797	2.63	23	2.83	2.44
GRAND TOTAL		151	202	99	98	156	18,820	3.63	916	4.86	6.70
		...	...	...	...	...	...	...	...	...	11.39
		...	...	...	...	...	...	...	...	...	7.82
		...	...	...	...	...	...	...	...	...	8.67
		...	...	...	...	...	...	...	...	...	6.20
		...	...	...	...	...	...	...	...	...	2.20

D.—POLICE.

- 1.—*Statement showing strength and cost of Police during 1877,
including the Railway Police.*

D.—

1.—Statement showing Strength and Cost of Police

PROVINCE.	COMMISSIONER'S DIVISION.	Name of District.	Inspector-General, Deputy and Assistant Inspectors-General.	SANCTIONED			
				Strength of District, Canton Police paid for wholly or			
				Number of District and Assistant District Superintendents.	Number of subordinate officers on Rs. 100 and upwards.	Number of subordinate officers on less than Rs. 100.	
1	2	3	4	5	6	7	
BENGAL.	Burdwan	Western Districts.					
		Burdwan	2	8	101		
		Bankoora	1	2	36		
		Beerbhoom	1	3	47		
		Midnapore	2	6	114		
		Hooahly	2	4	71		
		Howrah	1	7	85		
	Presidency	Central Districts.					
		24-Pergunnahs	3	11	140		
		Nuddea	2	7	91		
		Jessore	2	8	107		
		Moorshedabad	2	7	130		
	Rajshahye ...	Dinapore	2	4	54		
		Rajshahye	2	4	59		
		Runkpore	2	6	62		
		Bogra	1	8	38		
		Pubna	1	5	60		
		Darjeeling	1	3	31		
		Julpigoree	1	4	61		
	Dacca	Eastern Districts.					
		Dacca	2	5	63		
		Furzedpore	1	5	65		
		Backerkungeo	2	5	88		
		Mymensingh	2	6	72		
		Tipperah	1	3	44		
		Chittagong...	Chittagong	1	5	63	
Noakholly	1		4	51			
Chittagong Hill Tracts	3		4	45			
Total				41	129	1,763	

POLICE.

during 1877, including the Railway Police.

STRENGTH OF POLICE FORCE.

ment, Town or Municipal, and Water in part from Imperial Revenues.			Strength of Cantonment, Town, Municipal, and Water Police paid wholly from other than Imperial Re- venues.		Total Police.		Total cost of Government Police.	Total cost of other police.
Number of mounted police constables.	Number of foot police constables.	Number of water police constables.	Officers.	Men.	Officers.	Men.		
8	9	10	11	12	13	14	15	16
							Rs.	Rs.
..... 3	474	.....	18	300	129	774	1,00,851	26,135
.....	154	.....	3	64	42	221	41,325	4,665
.....	200	.....	1	23	52	223	50,121	1,602
.....	714	21	9	161	161	896	1,10,009	12,838
.....	327	.....	19	342	96	669	79,141	31,428
.....	573	.....	.....	8	93	583	75,721	34,332
.....	697	.....	57	576	211	1,273	1,81,727	57,872
.....	491	.....	13	265	113	756	1,08,718	22,719
.....	492	49	.....	76	117	617	11,563	3,556
.....	549	.....	12	256	151	806	1,26,885	22,572
.....	328	.....	2	30	62	358	69,047	2,446
.....	316	.....	5	65	70	381	69,577	5,480
.....	390	.....	3	29	73	416	82,895	2,475
.....	203	.....	12	30	44	233	46,166	2,528
.....	299	.....	5	90	71	389	72,531	6,062
.....	149	.....	2	24	37	173	36,736	3,909
.....	244	.....	1	13	62	269	62,932	1,392
.....	356	14	11	273	81	643	86,184	20,808
.....	304	28	3	70	74	402	79,671	4,664
.....	410	.....	3	110	98	529	1,20,826	7,113
.....	364	9	7	100	87	473	88,967	7,966
.....	276	.....	3	49	51	325	66,317	4,138
.....	341	.....	5	56	74	397	84,537	6,324
.....	296	.....	1	14	67	310	37,825	1,232
.....	604	.....	.....	.....	52	604	1,88,186	.....
8	9,553	121	185	3,021	2,148	12,703	22,54,118	2,94,996

D.—

1.—Statement showing Strength and Cost of Police

PROVINCE.	COMMISSIONER'S DIVISION.	Name of District.	Inspector-General, Deputy and Assistant Inspectors-General.	SANCTIONED			
				Strength of District, Canton Police paid for wholly or			
				Number of District and Assistant District Superintendents.	Number of subordinate officers on Rs. 100 and upwards.	Number of subordinate officers on less than Rs. 100.	
1	2	3	4	5	6	7	
BEHAR	Patna	Patna ... ..	.....	4	7	114
		Gya ... ..	.....	2	5	99
		Shahabad ... ..	.....	2	6	85
		Muzafferpore ... ..	.....	1	4	54
		Darbhanga ... ..	.....	1	4	49
		Sarun ... ..	.....	2	4	70
		Chumparun ... ..	.....	1	4	52
	Bhagulpore	Monghyr ... ..	.....	2	5	53
		Bhagulpore ... ..	.....	2	5	67
		Purneah ... ..	.....	2	6	77
		Sonthal Pergunnahs ... ..	.....	1	1	38
		Maldah ... ..	.....	1	3	40
	Total ... ..		.....	21	54	802
ORISSA	Orissa	Cuttack ... ..	.....	2	6	93
		Pooree ... ..	.....	1	4	77
		Balasore ... ..	.....	1	6	101
		Gurjhat ... ..	.....	1	2	28
	Total ... ..		.....	5	18	299
CHOTA NAGPORE	Chota Nagpore	South-West Frontier Agency.	.....			
		Hazareebagh ... ..	.....	2	4	87
		Lohardugga ... ..	.....	2	5	89
		Singbhoon ... ..	.....	1	1	29
		Manbhoon ... ..	.....	2	3	60
		Total	7	13	265
		Total of districts	74	214	3,159
		Government Railway Police		1	7	75
		Office of Inspector-General of Police, Lower Provinces		4
		Total		5	7	75
GRAND TOTAL		5	74	221	3,234		

POLICE—continued.

during 1877, including the Railway Police—concluded.

STRENGTH OF POLICE.

ment, Town or Municipal, and Water in part from Imperial Revenues.			Strength of Cantonment, Town, Municipal, and Water Police paid wholly from than Imperial Revenues.		Total Police.		Total cost of Government police.	Total cost of other police.
Number of mounted police constables.	Number of foot police constables.	Number of water police constables.	Officers.	Men.	Officers.	Men.		
8	9	10	11	12	13	14	15	16
							Rs.	Rs.
10	961	.....	20	305	145	1,326	1,34,883	55,384
4	499	.....	16	251	122	800	1,00,005	21,652
	388	.....	8	254	101	645	89,976	17,410
	320	.....	11	165	74	491	68,315	13,881
	284	.....	8	137	52	421	59,257	11,117
4	338	.....	11	162	57	500	68,861	12,401
	274	.....	2	37	59	315	57,168	2,570
	326	.....	8	107	68	433	76,086	10,480
	52	.....	6	123	80	180	75,298	9,602
7	304	.....	6	118	91	519	96,202	9,970
	264	.....	1	10	41	274	45,068	770
	226	.....	2	36	43	262	55,194	2,818
25	4,632	.....	99	1,809	976	6,466	9,27,943	1,68,151
	473	3	8	84	109	560	95,083	7,916
	341	.....	4	65	86	406	67,389	4,790
	434	26	2	28	110	488	93,017	2,336
	180	.....	.....	.....	31	180	33,231	.....
.....	1,428	29	14	177	336	1,634	2,88,670	14,942
14	413	.....	5	73	98	500	94,189	5,348
	412	.....	1	79	97	491	93,281	4,404
	148	.....	.....	10	31	158	31,351	180
10	252	.....	2	46	67	313	64,672	2,676
24	1,235	.....	8	208	293	1,467	2,84,093	12,908
57	16,848	150	306	5,215	3,753	22,270	37,54,824	4,90,997
	451	.....	.....	.....	83	451	30,912	81,104
	.....	.....	.....	.....	4	.....	1,18,570	.....
	451	.....	.....	.....	87	451	1,49,483	81,104
57	17,299	150	306	5,215	3,840	22,721	39,06,307	5,72,101

D.—

2.—Statement showing Distribution and Employment of the

1	2	3	4	5	6	7
PROVINCE.	COMMISSIONER'S DIVISION.	Name of District.	DISTRIBUTION			
			In District.			
			Guards at district, central, or subsidiary jails.		Guards over lock-ups and treasuries, or as escort to prisoners and treasure	
			Officers.	Men.	Officers.	Men.
BENGAL ...		BENGAL, Western Districts.				
		Burdwan ...	1	11	10	44
		Bankura ...	12	24	1	8
		Beerbhoom ...	12	26	4	13
		Midnapore ...	3	36	14	102
		Hoochly ...	12	12	10	87
		Howrah ...	.....	.....	2	22
		Central Districts.				
		24-Perkunnahs ...	1	4	25	163
		Nudda ...	2	49	8	63
		Jessore ...	2	32	13	163
		Moorshedabad ...	2	24	9	47
		Rajshahye ...				
		Dinapore ...	2	32	2	57
		Rajshahye ...	1	16	34	257
		Rungpore ...	3	52	5	56
		Bogra ...	2	24	6	46
		Pubna ...	2	20	4	27
		Darjeeling ...	1	12	7	50
		Julpigoreo ...	1	24	4	23
		Eastern Districts.				
		Dacca ...				
		Dacca ...	2	40	7	60
		Furzedpore ...	1	9	6	57
		Backergunge ...	3	40	7	45
		Mymensingh ...	2	36	5	27
		Tipperah ...	2	30	4	45
		Chittagong ...				
		Chittagong ...	2	28	2	27
		Noakholly ...	2	30	5	35
		Chittagong Hill Tracts ...	.....	.....	2	10
		Total ...	43	615	196	1,314

POLICE—continued.

Police Force, including the Railway Police, during 1877.

8	9	10	11	12	13	14	15	16	17	18	19
OF FORCE.				Area of whole district in square miles.	Population of whole district.	PROPORTION OF POLICE (OFFICERS AND MEN)					
On other duties.		On town, municipal, or harbour duty.	In cantonnments.			To area			To population		
Officers.	Men.					Of the whole district.	Of district, exclusive of towns.	Of towns.	Of the whole district.	Of district, exclusive of towns.	Of towns.
100	419	318	...	2,523	2,084,745	1 to 39	1 to 59	6 to 1	1 to 2,251	1 to 3,189	1 to 523
39	125	67	...	1,346	526,772	1 to 49	1 to 64	3 to 1	1 to 1,929	1 to 2,374	1 to 341
45	161	24	...	1,341	695,921	1 to 48	1 to 53	4 to 1	1 to 2,772	1 to 2,767	1 to 379
135	597	179	...	5,082	2,510,963	1 to 48	1 to 57	10 to 1	1 to 2,400	1 to 2,861	1 to 538
65	278	301	...	929	892,691	1 to 11	1 to 21	7 to 1	1 to 1,111	1 to 1,870	1 to 334
59	223	370	...	639	731,057	1 to 9	1 to 2	30 to 1	1 to 1,094	1 to 2,069	1 to 270
128	550	609	21	2,788	2,210,647	1 to 18	1 to 31	6 to 1	1 to 1,447	1 to 2,324	1 to 384
90	279	278	...	3,421	1,812,795	1 to 39	1 to 57	6 to 1	1 to 2,081	1 to 2,879	1 to 397
102	406	76	...	3,458	2,075,021	1 to 44	1 to 54	13 to 1	1 to 2,792	1 to 3,689	1 to 188
128	478	269	8	2,778	1,355,626	1 to 26	1 to 37	8 to 1	1 to 1,399	1 to 1,825	1 to 350
56	250	32	...	4,126	1,501,924	1 to 97	1 to 106	5 to 1	1 to 3,550	1 to 4,820	1 to 460
30	73	70	...	2,234	1,310,729	1 to 5	1 to 6	10 to 1	1 to 2,978	1 to 3,542	1 to 442
62	302	29	...	3,476	2,149,972	1 to 71	1 to 75	4 to 1	1 to 1,596	1 to 4,618	1 to 480
34	129	32	...	1,501	689,469	1 to 54	1 to 6	3 to 1	1 to 2,149	1 to 2,722	1 to 315
60	252	96	...	1,966	1,211,594	1 to 42	1 to 53	23 to 1	1 to 2,633	1 to 3,224	1 to 364
27	107	26	...	1,234	94,712	1 to 59	1 to 67	3 to 1	1 to 453	1 to 478	1 to 272
46	292	14	...	2,906	418,665	1 to 92	1 to 96	2 to 1	1 to 1,333	1 to 1,371	1 to 513
61	270	284	...	2,897	1,852,993	1 to 4	1 to 65	14 to 1	1 to 2,559	1 to 4,003	1 to 322
64	286	73	...	2,589	1,500,883	1 to 64	1 to 63	6 to 1	1 to 3,173	1 to 3,667	1 to 326
85	325	113	...	4,187	1,889,139	1 to 64	1 to 82	4 to 1	1 to 2,906	1 to 5,065	1 to 263
73	310	107	...	6,361	2,349,917	1 to 114	1 to 14	3 to 1	1 to 4,257	1 to 5,125	1 to 617
42	291	52	...	2,498	1,407,439	1 to 66	1 to 73	5 to 1	1 to 3,743	1 to 4,257	1 to 537
65	286	61	...	2,815	1,043,283	1 to 48	1 to 55	4 to 1	1 to 2,196	1 to 2,453	1 to 421
49	231	15	...	1,740	939,616	1 to 47	1 to 49	13 to 1	1 to 2,581	1 to 2,677	1 to 316
50	504	...	...	6,882	69,607	1 to 10	1 to 10	...	1 to 106	1 to 106	...
1,692	7,423	1,536	32	79,229	34,313,630	1 to 48	1 to 63	6 to 1	1 to 2,213	1 to 2,338	1 to 363

D.—

2.—Statement showing Distribution and Employment of the

1	2	3	4	5	6	7
PROVINCE.	COMMISSIONER'S DIVISION.	Name of District.	DISTRIBUTION			
			In District.			
			Guards at district, central, or subsidiary jails.		Guards over lock-ups and treasuries, or as escort to prisoners and treasure.	
			Officers.	Men.	Officers.	Men.
BEHAR		BEHAR.				
		Patna	3	42	21	80
		Gya	3	36	12	62
		Shahabad	1	12	9	65
		Muzafferpoore	3	40	3	24
		Darbhanga	3	40	3	28
		Sarun	2	30	22	116
		Chumparun	2	36	6	35
		Total	25	335	113	679
		ORISSA.				
		Cuttack	2	40	6	56
		Pooree	2	20	6	48
		Bahsore	2	16	5	27
		Gurjhat ... ..	.....	.....	4	41
		Total	6	76	21	172
CHOTA NAGPORE...	Orissa	CHOTA NAGPORE.				
		South-West Frontier Agency.				
		Hazareebagh	6	49	7	27
		Lohardugga	2	42	9	62
		Singbhoon	2	20	2	8
		Manbhoom	2	32	7	33
		Total	12	143	25	150
		Total of Districts	86	1,169	355	2,295
		Government Railway Police.	.....	.....	.....	.....
		Office of Inspector-General of Police, Lower Provinces.	.....	.....	.....	.....
		Total ... ..	.....	.....	.....	.....
		GRAND TOTAL	86	1,169	355	2,295

POLICE—continued.

Police Force, including the Railway Police, during 1877—concluded.

8	9	10	11	12	13	14	15	16	17	18	19
OF FORCE.						PROPORTION OF POLICE (OFFICERS AND MEN)					
On other duties.		On town, municipal, or harbour duty.	In cantonments.	Area of whole district in square miles.	Population of whole district.	To area			To population		
Officers.	Men.					Of the whole district.	Of district, exclusive of towns.	Of town.	Of the whole district.	Of district, exclusive of towns.	Of towns.
71	354	844	56	2,101	1,559,638	1 to 14	1 to 36	23 to 1	1 to 1,060	1 to 2,909	1 to 323
91	411	307	...	4,718	1,949,759	1 to 51	1 to 72	9 to 1	1 to 2,112	1 to 2,973	1 to 393
83	315	261	...	4,385	1,723,974	1 to 59	1 to 91	16 to 1	1 to 2,221	1 to 3,127	1 to 493
57	262	176	...	2,069	2,188,282	1 to 52	1 to 75	16 to 1	1 to 3,866	1 to 5,341	1 to 637
48	216	145	...	3,374	2,196,324	1 to 7	1 to 99	13 to 1	1 to 4,547	1 to 6,241	1 to 595
52	192	173	...	2,612	2,063,860	1 to 44	1 to 62	28 to 1	1 to 3,509	1 to 4,842	1 to 314
49	207	39	...	3,578	1,440,815	1 to 95	1 to 106	7 to 1	1 to 3,842	1 to 4,227	1 to 739
55	268	115	...	3,913	1,812,986	1 to 76	1 to 101	15 to 1	1 to 3,547	1 to 4,538	1 to 552
65	287	181	...	4,317	1,829,290	1 to 77	1 to 10	5 to 1	1 to 3,261	1 to 4,111	1 to 559
66	279	124	...	4,957	1,714,793	1 to 81	1 to 10	3 to 1	1 to 2,806	1 to 3,437	1 to 526
33	174	11	...	5,488	1,258,287	1 to 174	1 to 181	11 to 1	1 to 3,998	1 to 4,126	1 to 434
39	192	38	...	1,928	678,071	1 to 62	1 to 71	7 to 1	1 to 2,291	1 to 2,444	1 to 477
709	3,158	2,367	56	44,340	20,414,172	1 to 59	1 to 87	11 to 1	1 to 2,743	1 to 3,869	1 to 409
143	380	83	9	3,632	1,491,784	1 to 54	1 to 62	3 to 1	1 to 2,234	1 to 2,461	1 to 794
74	273	69	...	2,473	769,674	1 to 5	1 to 58	34 to 1	1 to 1,564	1 to 1,765	1 to 328
101	417	30	...	2,066	770,232	1 to 34	1 to 36	5 to 1	1 to 1,290	1 to 1,326	1 to 587
27	139	...	...	2,740	179,610	1 to 82	1 to 82	.....	1 to 851	1 to 851	.....
295	1,209	182	9	9,911	3,214,300	1 to 5	1 to 55	5 to 1	1 to 1,632	1 to 1,743	1 to 589
80	351	73	5	7,021	771,875	1 to 117	1 to 13	11 to 1	1 to 1,292	1 to 1,428	1 to 379
85	308	76	4	12,044	1,237,123	1 to 21	1 to 17	19 to 1	1 to 2,163	1 to 2,492	1 to 293
27	120	10	...	3,897	304,847	1 to 20	1 to 21	10 to 1	1 to 1,571	1 to 1,631	1 to 483
56	207	48	...	4,925	995,570	1 to 128	1 to 146	6 to 1	1 to 2,539	1 to 2,904	1 to 357
248	986	207	9	27,987	3,309,415	1 to 158	1 to 18	10 to 1	1 to 1,880	1 to 2,098	1 to 322
944	12,776	6,292	106	1,54,368	60,251,517	1 to 59	1 to 78	7 to 1	1 to 2,315	1 to 2,944	1 to 385
83	451	...	...	.....	.....	.....	.....	.....	.....	.....	.....
4	...	...	...	.....	.....	.....	.....	.....	.....	.....	.....
87	451	...	...	.....	.....	.....	.....	.....	.....	.....	.....
931	13,227	6,292	106	1,54,368	60,251,517	1 to 59	1 to 78	7 to 1	1 to 2,315	1 to 2,944	1 to 385

D.—POLICE—continued.

3.—Statement of Village and Town Police not subject to Rules of Regular Police during 1877.

PROVINCE.	COMMISSIONER'S DIVISION.	Name of district.	VILLAGE AND TOWN POLICE NOT SUBJECT TO RULES OF REGULAR POLICE.				By whom paid.	Total annual cost.
			Number of men.	Average number of houses in each man's charge.	Average annual emolument of each man.			
BENGAL.	Burdwan	<i>Western Districts.</i>						Rs. A. P.
		Burdwan ...	14,184	39'6	18	Chakran lands, ryots, &c. ...	2,62,294	0 0
		Bankoora ...	4,097	25	27'8	From jukheer lands and by ryots ...	1,30,824	0 0
		Boerbhoom ...	6,897	31'6	16'8	Zemindars and ryots ...	1,15,512	11 6
		Midnapore ...	10,516	49'8	16'4	In cash paid by Government; in cash paid by service lands; in cash paid by ryots; in cash paid by zemindars ...	1,73,602	0 0
		Hoozhly ...	3,162	55	30 about.	Villagers and chakran lands ...	91,155	0 0
		Howrah ...	1,889	65'5	27'1	970 chowkidars are maintained by chakran lands, and 919 receive their pay from the villagers ...	51,102	0 0
		<i>Central Districts.</i>						
		24-Pergunnahs ...	4,049	56'6	48	By the villagers ...	1,94,832	0 0
		Nudda ...	4,474	60	38	Ryots ...	1,70,612	0 0
	Presidency	Jessore ...	4,552	61	40'1	Villagers ...	1,82,807	4 0
		Moorsheadabad ...	4,850	38'4	36	Zemindars and ryots ...	1,74,699	0 0
		<i>Eastern Districts.</i>						
		Dinapore ...	5,356	36	16	Villagers ...	16,975	0 0
	Rajshahye	Rajshahye ...	3,280	70	36	Panchayets and villagers ...	1,18,080	0 0
		Rainpore ...	4,089	62'7	36'1	Villagers ...	1,19,432	0 0
		Bogra ...	2,377	38'01	30'5	Ditto ...	72,736	0 0
		Pahna ...	2,370	83'25	43'5	Ditto ...	1,03,095	0 0
		Julpikoree ...	1,109	54	30	Ditto ...	34,028	0 0
		<i>Eastern Districts.</i>						
	Dacca	Dacca ...	3,421	77'9	33'8	Villagers ...	1,12,518	0 0
		Furcedpore ...	3,031	59'3	36'8	The village chowkidars by the villagers, and those of the Goolundo bazar by the town committee ...	1,11,933	0 0
		Backergunge ...	4,268	50'58	36	Zemindars and villagers ...	1,53,648	0 0
		Mymensingh ...	6,213	49	36	Villagers ...	2,24,748	0 0
		Tippurah ...	2,754	81	39	Zemindars and villagers ...	1,07,793	0 0
		<i>Chittagong Hill Tracts</i>						
	Chittagong	Chittagong ...	1,921	62	39	Villagers ...	86,084	0 0
		Noakholly ...	2,533	59	25	Landholders, proprietors, and inhabitants ...	67,397	0 0
	Total		102,730	57'23	32		29,27,467	15 0

D.—POLICE—continued.

3.—Statement of Village and Town Police not subject to Rules of Regular Police during 1877—concluded.

PROVINCE.	COMMISSIONER'S DIVISION.	Name of district.	VILLAGE AND TOWN POLICE NOT SUBJECT TO RULES OF REGULAR POLICE.				By whom paid.	Total annual cost.
			Number of men.	Average number of houses in each man's charge.	Average annual emoluments of each man.			
BEHAR.	Patna	<i>Eastern Districts—concluded.</i>						Rs. A. P.
		Patna ...	3,544	53	25	Zemindars, ryots, malicks, panchayets	87,032	0 0
		Gya ...	5,173	59	26	Zemindars and ryots	1,35,468	0 0
		Siababad ...	5,911	84	30	Ditto	14,820	0 0
		Muzafferpore ...	4,413	71	31	Zemindars	1,37,497	0 0
		Buxihunga ...	4,166	60	24	Zemindars and ryots	1,02,007	0 0
		Saran ...	4,237	62	23	Zemindars and villagers	97,644	3 3
		Champanan ...	2,640	71	29	Ditto	61,849	0 0
		Monohyr ...	3,313	56	34	Zemindars and ryots	1,12,849	1 0
		Bhagulpore ...	3,632	77	16	Ditto	59,426	0 0
ORISSA.	Bhagulpore	Purneah ...	4,769	61	36	Residents of the district	1,71,684	0 0
		South Per- gunnahs.	3,413	88	9	Zemindars and ryots	32,921	0 0
		Maldah ...	1,010	63	48	Ryots	14,198	bec- ghas of land.
		Total ...	46,021	67	26		77,280	0 0
							10,91,630	4 6
							and	21,644
								bec- ghas of land.
		Cuttack ...	5,063	55	26	The greater part of their in- come is derived from jacer land exempt from revenue assessment; the remainder by periodical contributions from villagers	1,31,231	0 0
		Pooree ...	2,336	48	16	Partly by Government and villagers; also hold jacer	37,508	7 6
		Balasore ...	2,230	65	12	Service land and subscription from villagers	28,244	0 0
CHOTA NAGPUR.	Chota Na- pore	Gurjhat ...	447	73	16	By Government given the land	Cannot be given.	
		Total ...	10,076	59	17		1,96,983	7 6
		<i>South-West Frontier Agency.</i>						
		Hazaribagh ...	4,115	59	12	Paid by ryots, thikadars, and zemindars partly in cash and partly in land chakran	51,475	0 0
		Lohardugga ...	3,775	58	20	Zemindars, illaquadars, and ryots	78,330	4 0
		Singbhoon ...	1,671	46	5	Villagers	9,070	8 0
		Manbhan ...	6,780	31	24	Service land, partly by land and partly by village contri- bution, by zemindars and dikwars	1,02,116	0 0
		Total ...	19,341	48	15		2,40,991	12 0
		GRAND TOTAL	175,768	50	27		44,57,073	7 6
							and 21,644	bec- ghas of

D.—POLICE—continued.

4.—Return showing Equipment, Discipline, and General Internal Management of the Force during the year 1877, exclusive of that under the Commission of Police, Calcutta.

	Regular.	Municipal.	Total.
Total sanctioned strength—			
Inspectors	220	6	226
Sub-Inspectors	723	13	736
Head Constables	2,150	349	2,709
Men	16,691	6,931	22,722
Armament of the force—			
Number provided with fire-arms	6,316	.....	6,316
Number provided with swords only, or swords and batons	1,580	12	1,592
Number provided with batons only	12,837	5,667	18,504
<i>Punishments.</i>			
Dismissed—			
Inspectors	3	.....	3
Sub-Inspectors	13	2	15
Head Constables	67	13	80
Men	477	611	1,088
Fined, degraded, or suspended by their own departmental officer—			
Inspectors	10	1	11
Sub-Inspectors	325	8	333
Head Constables	903	126	1,029
Men	2,971	1,506	4,567
Punished judicially by a Magistrate under Police Act—			
Inspectors ... ..	.....	.....	.....
Sub-Inspectors	3	.....	3
Head Constables	16	2	18
Men	200	97	297
Punished under sections 330, 331, and 348, Penal Code—			
Inspectors ... ..	.....	.....	.....
Sub-Inspectors ... ..	.....	.....	.....
Head Constables	5	.....	5
Men	9	6	15
Ditto under Chapter IX of Penal Code—			
Inspectors ... ..	.....	.....	.....
Sub-Inspectors	1	.....	1
Head Constables	8	1	9
Men	36	8	44
Other offences—			
Inspectors	3	.....	3
Sub-Inspectors	11	1	12
Head Constables	40	4	44
Men	251	114	365
<i>Rewards.</i>			
Number of police rewarded during the year—			
By promotion	349	45	394
By money rewards	638	102	740
<i>Education.</i>			
Number of police who can read and write—			
Inspectors	215	6	221
Sub-Inspectors	684	11	695
Head Constables	2,093	249	2,342
Men	6,063	711	6,774

D.—POLICE—continued.

4.—Return showing Equipment, Discipline, and General Internal Management of the Force during the year 1877, exclusive of that under the Commissioner of Police, Calcutta—concluded.

	Regular.	Municipal.	Total.
Number of police under instruction during the year—			
Inspectors	3	.....	3
Sub-Inspectors	145	9	154
Head Constables	3,157	965	4,122
Men	2,284	1,578	3,862
Number enlisted during the year	10,579	4,084	14,663
“ of men of one year's service and under 10 years	7,889	1,300	9,249
“ of „ 10 years' service and upwards			
“ who have left the force during the year—			
On pension	61	3	64
On gratuity	124	23	147
By resignation without pension or gratuity	965	543	1,508
“ dismissal	560	626	1,186
“ discharge otherwise than stated above	266	208	474
“ desertion	182	155	337
“ death	468	148	616
Percentage in hospital during the year to total strength of force.	(Regular and municipal together.)		63.7
Percentage of deaths during the year to total strength of force.	2.3	2.3	.....

D.—POLICE—continued.

5.—Return showing the Race and Religion or Caste of Officers and Men employed in the Police during the year 1877, exclusive of the Force under the Commissioner of Police, Calcutta.

	Regular.	Municipal.	Total.
* RACE.			
<i>Europeans.</i>			
District or Assistant District Superintendents—			
Military or covenanted civil	8	.....	8
Uncovenanted	58	.....	58
Subordinate officers—			
On Rs. 100 or upwards	16	.....	16
Below Rs. 100	1	.....	1
Constables	11	2	13
<i>Eurasians.</i>			
District or Assistant District Superintendents	1	.....	1
Subordinate officers—			
On Rs. 100 or upwards	12	4	16
Below Rs. 100	9	2	11
Constables	1	.....	1
<i>Natives.</i>			
District or Assistant District Superintendents	8	.....	8
Subordinate officers—			
On Rs. 100 or upwards	183	.....	183
Below Rs. 100	3,085	359	3,444
Constables	16,453	5,902	22,355
RELIGION OR CASTE.			
<i>OFFICERS.</i>			
Christians	142	12	154
Mahomedans	816	112	928
<i>Hindoos.</i>			
Brahmins	659	78	737
Rajpoots	208	53	261
Goorkhas	47	2	49
Seikhs	62	8	70
High caste Soodras	694	46	740
Low caste Soodras	100	12	112
Hill men	5	1	6
Hindoos of all other castes	434	38	472
Other religions	26	2	28
<i>Men.</i>			
Christians	99	10	109
Mahomedans	4,807	1,892	6,699
Hindoos—			
Brahmins	2,449	807	3,256
Rajpoots	3,092	1,103	4,195
Goorkhas	435	23	458
Seikhs	66	1	67
High caste Soodras	1,749	406	2,155
Low caste Soodras	915	396	1,311
Hill men	233	.....	233
Hindoos of all other castes	2,115	1,317	3,432
Other religions	373	7	380
Grand total of officers and men	19,846	6,326	26,172

D.—POLICE—continued.

6.—Return showing the number of persons convicted in cognizable and non-cognizable cases during the year 1877 in the several districts of Bengal.

PROVINCE.	COMMISSIONER'S DIVISION.	Name of District.	Population.	Number of cognizable cases reported.	Number of persons convicted in cognizable cases.	Number of persons convicted in non-cognizable cases.	Total number of persons convicted in cognizable and non-cognizable cases.
BENGAL	Burdwan	Burdwan ...	2,034,745	2,583	2,048	2,386	4,434
		Bankoora ...	520,772	822	459	206	665
		Beerbhoom ...	695,921	1,000	654	264	926
		Midnapore ...	2,510,963	4,188	1,756	983	2,739
		Hoochly ...	892,691	2,464	1,143	1,346	2,489
		Howrah ...	731,657	3,441	3,871	1,386	5,257
	Presidency	24-Pergunnahs ...	2,210,047	4,208	2,836	1,883	4,719
		Nuddea ...	1,812,795	3,538	1,856	1,262	3,094
		Jessore ...	2,075,021	3,568	1,655	1,737	3,372
		Moorshedabad ...	1,353,626	3,651	1,829	1,062	2,891
	Rajshahye and Cooch Behar.	Dinagapore ...	1,501,224	1,794	778	667	1,445
		Rajshahye ...	1,310,729	2,707	986	559	1,545
		Kumtapore ...	2,149,972	2,797	1,029	1,283	2,272
		Bogra ...	689,469	1,649	1,120	397	1,457
		Pinna ...	1,211,594	1,272	640	735	1,373
		Darjeeling ...	94,712	1,014	580	120	760
		Julpigoree ...	418,665	.....	.....	219	219
	Dacca	Dacca ...	1,882,993	4,083	2,200	2,083	5,275
		Furteedpore ...	1,500,883	2,610	1,176	1,131	2,307
		Backergunge ...	1,880,139	4,834	1,251	1,498	2,749
		Mymensingh ...	2,349,917	3,902	1,322	1,171	2,493
		Tipperah ...	1,407,489	2,119	1,388	1,156	2,524
	Chittagong	Chittagong ...	1,043,283	1,732	1,145	582	1,727
		Chittagong Hill Tracts ...	69,907	131	243	414	357
		Noakholly ...	949,616	2,068	1,220	756	2,006
BEHAR	Patna	Patna ...	1,539,638	4,470	2,915	1,289	4,204
		Gya ...	1,949,750	3,815	1,316	952	2,268
		Shahabad ...	1,723,974	2,915	1,847	1,453	3,300
		Mozufferpore ...	2,188,382	2,395	1,091	708	1,799
		Durbhanga ...	2,196,324	2,996	1,135	2,349	3,484
		Saran ...	2,063,860	2,810	97	841	1,815
	Chumparun	Chumparun ...	1,440,815	1,305	780	411	1,191
		Monghyr ...	1,812,986	2,792	1,559	1,100	2,659
		Bhagalpore ...	1,826,290	1,469	827	776	1,603
	Bhagnipore	Furneah ...	1,714,795	2,198	828	697	1,425
		Sonthal Pergunnahs ...	1,259,287	2,944	1,289	1,741	3,030
		Maldah ...	678,071	1,325	611	372	1,013
ORISSA	Orissa	Cuttack ...	1,494,784	2,383	1,057	982	2,039
		Pooree ...	709,674	3,452	2,154	401	2,615
		Balasore ...	770,232	1,805	737	418	1,155
		Gurjists ...	179,010	731	339	116	455
		Hazareebagh ...	771,875	1,735	864	511	1,375
CHOTA NAG-PORE.	Chota Nagpore	Lohardugga ...	1,237,123	1,174	918	391	1,309
		Siugbhoom ...	304,847	283	151	179	330
		Manbhoom ...	995,570	1,270	605	628	1,233

7.—Return of Criminal Cases cognizable by

1	2	3	3a	4	4a	5	6	7	8	9	3a	10	
Serial number.	LAW UNDER WHICH PUNISHABLE.	DESCRIPTION OF CRIME.	CASES.										
			Average number reported during five preceding years.	Reported to have been committed during the year.	Number of cases not inquired into under section 117 of the Criminal Procedure Code.	Reported to have been committed in previous years and brought under inquiry during the year.	Investigated by police.	By police <i>suo motu</i> .	By order of the Magistrate on complaint, or of his own motion, in which no previous information was given to the police.	By order of the Magistrate after the police has refused to inquire.	Number of cases in columns 6 to 8 in which conviction was obtained.	Number of cases declared by Magistrate to be false and never to have occurred.	Pending at end of last year.
1	115	Abetment of offence not committed, &c.	6	...	...	...	...	...	...	...	...	...	...
	117	Abetting commission of offence by public, &c.	4	...	...	...	...	...	...	...	...	...	...
	118, 119	Concealing design to commit offence, &c.	14	1	...	...	...	1	...	...	...	...	...
		Total ...	24	1	...	...	...	1	...	...	...	...	...
	CLASS I.—Offences against the State, Public Tranquillity, Safety, and Justice.												
2	131 to 136, 138 ...	Offences relating to Army and Navy.	2	...	...	...	...	...	...	...	...	...	...
3	231 to 263, 467 ...	Offences relating to coin, stamps, and Government notes.	169.2	144	...	1	124	4	...	68	5	4	...
4	212, 216	Harbouring an offender.	34.4	18	...	...	11	1	...	5	1	...	...
5	224 to 226	Other offences against public justice.	565	521	...	7	426	27	...	357	16	30	...
6	143 to 153, 157, 158.	Rioting or unlawful assembly.	3,033	2,477	12	41	1,520	316	5	866	370	705	...
7	140, 170, 171 ...	Personating public servant or soldier.	62	50	...	...	41	4	...	35	...	1	...
		Total ...	3,863.8	3,210	12	52	2,122	382	5	1,331	302	710	...
	CLASS II.—Serious Offences against the Person.												
8	302, 303, 306 ...	Murder { by ...	...	...	...	...	...	...	...	...	...	...	...
9		by ...	8.5	4	...	...	4	...	...	...	...	...	...
10		by ...	18.4	10	...	...	10	...	...	...	...	...	...
11		by ...	25	28	...	3	25	3	...	3	9	19	...
12		by ...	372.6	319	1	4	319	5	...	165	56	...	...
13	307	Attempt at murder	74	66	...	2	64	2	...	23	15	10	...
14	304, 308	Culpable homicide	304	244	...	6	235	16	...	93	51	107	...
15	376	Rape	467.6	340	2	5	280	33	1	31	153	...	...
16	377	Unnatural offences	64	70	...	1	64	4	...	20	14	1	...
17	317, 318	Exposure of infants or concealment of birth.	164.4	154	2	2	138	6	...	63	13	3	...
18	305, 306, 309 ...	Attempt at, and abetment of, suicide.	428	475	7	3	452	5	...	275	54	...	...
19	320, 331, 333 ...	Grievous hurt for the purpose of extorting property or confession, or deterring public servant.	5.3	2	...	...	1	...	...	...	...	...	...
20	325, 326, 335 ...	Grievous hurt ...	1,035	721	7	21	635	37	...	333	87	...	...
21	328	Administering stupefying drugs to cause hurt.	31.8	20	...	1	20	1	...	5	...	...	...
22	327, 330, 332 ...	Hurt for purpose of extorting property or confession, or deterring public servant.	44	36	...	...	20	7	...	6	11	...	...
23	324	Hurt by dangerous weapon	885.8	838	10	14	710	41	3	255	165	...	...
24	363 to 369	Kidnapping or abduction	406.6	318	3	4	152	66	...	37	109	...	...

ICE—continued

ice during the year 1877 exclusive of Cases in Calcutta.

	12	12a	13	14	15	16	17	a 18 b		19	20	21	22	23	24	25	26	27
PERSONS.										PROPERTY.								
Number arrested or ordered on probation during year.	By order of Magistrate.	Total.	Died, escaped, or transferred before a trial.	Released without being brought before a Magistrate.	Number who actually appeared before a Magistrate.	Acquitted or discharged after appearance before a Magistrate.	Finally convicted (including persons ordered to give security for good conduct).	By Magistrate.	By Sessions or High Court.	Otherwise disposed of, i.e. died, transferred, &c., after commencement of trial.	In custody of police.	On bail.	Under trial before Magistrate.	Committed to Sessions.	Number of cases in which property was stolen.	Number of cases in which property was recovered.	Amount of property stolen.	Amount of property recovered.
...
...	...	3	...	...	3	3	...	...	...	...	...	...	...	...	...	...	...	...
...	3	...	...	...	3	3	...	...	...	...	...	...	...	...	...	...	...	...
...
...	26	177	...	4	173	59	12	71	19	...	...	...	...	12	...	...	...	...
...	10	28	...	...	28	20	1	6	1	...	...	...	...	...	...	...	...	...
...	135	757	3	11	743	124	10	586	1	...	...	...	18	...	...	...	...	...
...	1,792	8,831	16	114	8,686	2,566	257	5,120	145	34	...	15	553	11	4	4	127	27
...	5	66	1	...	65	17	...	46	...	2	...	...	...	...	...	...	...	...
...	1,968	9,859	20	129	9,695	2,786	280	5,829	169	40	...	15	571	23	4	4	127	27
...
...	...	...	...	4	26	...	12	...	14	...	...	...	...	...	3	2	430	56
...	...	15	...	...	15	4	8	...	2	...	...	...	...	1	7	3	868	210
...	42	...	...	5	37	13	13	...	6	...	...	...	...	4	...	...	...	...
...	66	741	1	12	723	162	195	...	186	9	...	5	63	108	...	2	32	30
...	6	81	...	5	76	18	14	...	32	...	...	...	...	...	...	...	...	...
...	30	499	1	11	486	101	137	...	182	6	...	1	26	...	...	...	...	...
...	67	265	...	15	250	117	51	...	4	...	...	...	...	...	...	...	...	...
...	6	63	...	6	57	21	9	...	1	...	...	...	...	...	...	...	...	...
...	11	109	...	4	105	25	4	...	34	...	...	...	...	3	6	...	...	...
...	10	386	3	12	377	89	...	279	1	5	...	1	12	...	...	...	...	...
...	...	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...
...
...	186	1,100	2	28	1,069	281	45	575	90	7	...	1	68	3	...	...	...	...
...	...	23	...	...	23	7	3	7	2	...	...	...	...	...	3	3	119	61
...	30	59	...	...	65	6	28	3	18	1	...	...	...	3	...	...	...	...
...
...	181	956	3	40	912	403	9	416	8	...	...	1	75	1	...	...	...	...
...	108	324	...	6	318	167	30	36	45	2	...	...	...	...	...	2	341	165

7.—Return of Criminal Cases cognizable by the I

1	2	3	3a	4	4a	5	6	7	8	9	9a	10
Serial number.	LAW UNDER WHICH PUNISHABLE.	DESCRIPTION OF CRIME.	CASES.									
			Average number reported during five preceding years.	Reported to have been committed during the year.	Number of cases not inquired into under section 117 of the Criminal Procedure Code.	Reported to have been committed during the year and brought under inquiry during the year.	Investigated by police.					
							By police <i>suo motu</i> .	By order of the Magistrate on complaint, or of his own motion, in which no previous information was given to the police.	By order of the Magistrate after the police has refused to inquire.	Number of cases in columns 6 to 9 in which conviction was obtained.	Number of cases declared by Magistrate to be false and never to have occurred.	Pending at end of last year.
25	36C to 348 ...	Wrongful confinement and restraint in secret, or for purpose of extortion.	392	263	...	4	102	60	2	22	75	8
26	372, 373 ...	Selling, letting, or unlawfully obtaining a minor for prostitution.	42.2	17	...	...	13	2	...	4	7	2
27	371 ...	Habitually dealing in slaves.	8	...	...	...	...	...	...	...	...	...
28	353, 354, 356, 367	Criminal force to public servant or woman, or in attempt to commit theft or wrongfully confine.	1,037.4	1,113	5	10	693	152	...	308	176	12
29	304A, 333 ...	Rash or negligent act causing death or grievous hurt.	65.2	90	...	...	85	1	...	44	6	6
Total ...			5,972.9	5,068	37	80	1,915	435	6	1,634	927	175
CLASS III.— <i>Serious Offences against Person and Property, or against Property only.</i>												
30	395, 397, 398 ...	Dacoity ...	422.8	182	...	5	171	6	...	35	10	102
31	399, 402 ...	Preparation and assembly for dacoity.	10.6	2	...	...	...	...	...	...	1	...
32	394, 397, 398 ...	Robbery { by poisonous or stupefying drugs.	1.2	1	...	...	1	...	...	...	...	...
		{ by other means in dwelling-house.	28.2	29	...	...	27	...	...	18	5	...
		{ on the highway between sunset and sunrise.	49	25	...	...	24	1	...	7	7	2
33	392, 393 ...	Robbery... on the highway between sunset and sunrise.	54.4	25	...	...	24	...	...	5	6	...
34	270, 281, 282, 430 to 433, 455 to 440.	Other robberies.	350.4	152	1	4	135	7	4	28	70	12
		Serious mischief and cognate offences.	1,440.2	907	11	23	704	113	4	153	270	22
34A	428, 429 ...	Mischief by killing, poisoning, or maiming any animal.	210.4	763	8	14	534	79	...	189	120	18
35	454, 455, 457 to 460.	Lurking house-trespass, or house-breaking with intent to commit an offence, or having made preparation for hurt.	24,130.2	20,323	4,841	347	15,351	67	119	1,325	1,180	135
36	440 to 452 ...	House-trespass with view to commit an offence, or having made preparation for hurt.	451	296	5	4	242	22	...	177	51	19
37	412, 413 ...	Receiving stolen property by dacoity or habitually.	33.6	16	...	...	15	...	...	4	...	10
Total ...			27,201.0	22,726	4,864	397	17,233	295	127	1,876	2,059	323

LICE—continued.

ring the year 1877, exclusive of Cases in Calcutta—continued.

12	12a	13	14	15	16	17	a 18 b		19	20	21	22	23	24	25	26	27	
PERSONS.														PROPERTY.				
Number arrested or cared on her process during the year.	By order of Magistrate.	Total.	Died, escaped, or transferred before trial.	Released without being brought before a Magistrate.	Number who actually appeared before a Magistrate.	Acquitted or discharged after appearance before a Magistrate.		Finally convicted (including persons ordered to give security for good conduct).	Number pending at end of year.	Before being put on trial.	In custody of police.	On bail.	Under trial before Magistrate.	Committed to Sessions.	Number of cases in which property was stolen.	Number of cases in which property was recovered.	Amount of property stolen.	Amount of property recovered.
						By Magistrate.	By Sessions or High Court.											
1	54	183	...	...	183	122	1	46	1	...	...	...	13	...	2	...	...	...
7	4	33	...	...	33	21	2	10	...	...	...	...	...	...	...	...	...	...
3	493	1,553	1	27	1,529	613	26	773	...	8	...	1	79	...	2	...	24	...
6	14	1-4	...	1	125	53	10	43	14	...	...	...	3	2	...	...	...	...
2	1,270	6,601	11	176	6,404	2,244	507	2,332	712	41	...	10	397	181	21	12	1,886	522
4	27	623	1	40	562	140	160	1	185	6	...	11	40	30	122	61	86,933	22,626
...
...
1	8	59	...	3	56	7	8	13	25	1	...	...	...	2	21	16	1,024	366
9	4	35	...	...	35	15	1	11	2	...	...	...	6	...	15	12	949	261
6	...	20	...	5	21	11	...	7	2	...	...	...	1	...	14	5	2,394	86
7	26	175	...	10	165	83	12	51	5	...	...	...	14	...	61	32	2,003	312
1	205	798	2	115	651	323	44	205	26	7	...	20	37	9	...	...	...	...
0	165	643	1	40	600	268	4	300	...	2	1	1	25	...	4	1	44	12
1	246	3,645	2	400	3,227	1,092	59	1,841	106	14	1	15	99	16	10,325	1,801	3,48,604	45,275
7	91	377	1	8	357	107	4	227	1	2	...	11	16	...	61	40	866	304
7	1	58	...	...	58	6	24	...	19	1	...	...	5	3	7	8	645	441
3	773	6,429	7	680	5,732	2,052	316	2,656	371	33	2	58	244	60	10,629	1,976	4,43,572	68,785

7.—Return of Criminal Cases cognizable by

1	2	3	3a	4	4a	5	6	7	8	9	9a	10
Serial number.	LAW UNDER WHICH PUNISHABLE.	DESCRIPTION OF CRIME.	CASES.									
			Average number reported during five preceding years.	Reported to have been committed during the year.	Number of cases not inquired into under section 117 of the Criminal Procedure Code.	Reported to have been committed in previous years and brought under inquiry during the year.	Investigated by police.					
							By police <i>suo motu</i> .	By order of the Magistrate on complaint of his own motion, in which no previous information was given to the police.	By order of the Magistrate after the police has refused to inquire.	Number of cases in columns 6 to 8 in which conviction was obtained.	Number of cases declared by Magistrate to be false and never to have occurred.	Pending at end of last year.
38	354	Hurt on grave or sudden provocation.	73.4	99	1	1	70	12	1	70	1	2
38A	323	Voluntarily causing hurt.	3,874.6	6,090	484	51	2,661	669	17	1,790	439	204
39	341 to 344 ...	Wrongful restraint and confinement.	5,830.8	4,221	52	56	1,549	679	4	466	1,212	157
40	386, 337... ..	Rash act, causing hurt or endangering life.	43.2	52	...	1	39	1	...	23	3	1
41	374	Compulsory labour	13.8	5	...	...	2	2	...	...	...	...
	Total		9,835.8	10,167	637	109	4,321	1,383	22	2,319	1,655	356
42	453, 456 ...	Lurking house-trespass or house-breaking.	2,689.4	1,443	773	34	624	23	4	246	98	19
43	379 to 392 ...	Theft ... { of cattle ... ordinary ...	2,928.8	2,347	19	47	1,901	250	5	913	422	70
44	406 to 408 ...	Criminal breach of trust...	36,409	33,388	2,167	222	22,898	2,851	83	7,687	6,090	99
44	411, 414 ...	Receiving stolen property	2,741.8	2,321	12	29	717	431	5	288	512	40
46	447, 443 ...	Criminal or house-trespass	2,628.6	2,107	1	29	2,015	60	5	1,492	89	173
47	461, 462 ...	Breaking closed receptacle	8,921.6	8,908	167	97	2,228	1,316	10	1,360	1,341	26
	Total		13.2	23	2	1	19	1	...	1	2	...
	Total		56,331.4	50,539	3,139	959	30,402	4,977	112	11,993	9,144	1,090
48	311, 400, 401 ...	Belonging to gang of thieves, dacoits, robbers, and thieves.	3.8	6	...	...	4	1	...	4	...	27
49	Chap. XXXVIII, C. P. C., and Act IX of 1874.	Vagrancy and bad character.	3,478.6	2,362	...	20	1,944	865	...	1,082	51	230
50	295 to 297 ...	Offences against religion ..	28.4	20	...	1	9	3	...	7	...	1
51	—	— Gambling Act ...	123.6	107	...	...	102	3	...	95	...	...
52	—	— Excise Laws ...	1,742.8	2,004	...	2	1,698	80	...	1,444	47	34
53	—	— Railway Laws ...	457.4	449	...	1	412	19	...	370	4	5
54	—	— Salt and Customs Laws.	1,297.6	1,494	2	1	1,437	11	1	1,361	21	31
55	—	— Stage Carriage Act.	33.4	22	...	...	20	2	...	16	2	...
56	—	— Stamp Act ...	11.8	21	...	2	2	8	...	8	...	1
57	264, 277, 279, 280, 283, 285 to 286, 289, 291 to 294, section 34 of Act V of 1861, and any other municipal or local laws.	Public and local nuisances	8,945.4	9,422	4	19	9,157	103	...	8,368	24	57
	Total		15,328.8	16,497	6	46	14,695	1,085	1	13,655	149	386
58	Other special and local laws cognizable by police.	.....	733.6	481	...	...	432	25	...	428	1	10
	GRAND TOTAL		119,269.7	108,960	8,505	1,043	63,218	8,571	275	33,266	14,627	3,570

ICE—continued.

ice during the year 1877, exclusive of Cases in Calcutta—concluded.

12	12a	13	14	15	16	17	a 18 b	19	20	21	22	23	24	25	26	27	
PERSONS.													PROPERTY.				
Per ar- rested or red on pro- ducing year.	By order of Ma- gistrate.	Total.	Died, escaped, or transferred before trial.	Released without being brought before a Magistrate.	Number who actually appeared before a Magistrate.	Acquitted or discharged after appearance before a Magistrate.	Finally convicted (including persons ordered to give security for good con- duct).	Otherwise disposed of, ead, i- transferred, &c., after com- mencement of trial.	Number pending at end of year.		Under trial before Magis- trate.	Committed to Sessions.	Number of cases in which pro- perty was stolen.	Number of cases in which pro- perty was recovered.	Amount of property stolen.	Amount of property recovered.	
						By Magistrate.	By Sessions or High Court.		Before being put on trial.	On bail.							
23	135	...	7	128	16	1	109	...	1	...	1	...	...	...	...	...
2,864	6,669	74	119	6,470	2,298	23	3,887	55	12	6	189	4	...	...	...	...
1,486	3,426	13	81	3,323	1,716	24	1,337	...	...	9	180	...	...	...	...	...
8	53	...	...	53	21	...	31	...	...	...	1	...	...	...	...	...
4	9	...	...	9	7	...	2	...	...	...	...	...	...	...	...	...
4,390	10,202	87	207	9,983	4,118	50	5,966	55	19	15	371	4	...	...	...	...
44	520	...	24	504	170	12	309	3	1	1	9	...	26	14	1,116	103	
320	2,385	5	173	2,205	759	140	1,338	10	...	2	84	...	1,740	1,280	43,988	33,074	
5,774	23,232	76	1,895	21,714	8,466	132	2,458	52	43	20	971	12	19,573	9,337	3,50,153	1,20,547	
757	1,412	17	33	1,362	818	22	430	3	...	...	...	...	690	216	67,672	41,217
241	3,685	7	68	3,665	932	77	2,444	48	...	1	93	3	1,811	1,755	58,780	36,001	
5,188	8,707	90	121	8,450	1,301	34	3,766	2	25	...	322	...	18	13	218	140	
...	6	...	...	6	4	...	2	...	...	37	...	...	6	1	131	10
12,324	30,966	204	1,814	37,846	15,450	291	20,327	118	81	22	70	1,550	17	23,836	12,596	5,22,058	2,31,101
1	61	...	...	61	14	19	2	22	...	...	...	8	2	2	119	44
551	3,194	6	11	3,173	912	25	2,182	2	17	4	...	...	...	...	...	...
10	25	...	...	25	11	...	14	...	...	...	...	...	...	...	...	...
21	518	...	2	498	60	...	148	...	...	18	...	...	...	...	...	...
597	2,726	1	16	2,707	465	...	2,216	...	...	2	26	...	...	...	...	...
47	647	1	4	641	69	4	460	...	1	1	7	...	...	...	...	...
125	1,726	...	5	1,720	111	5	1,599	...	2	1	3	...	...	...	...	...
5	23	...	...	23	4	...	21	...	...	...	...	...	...	...	...	...
40	43	...	...	43	8	...	35	...	...	...	...	...	...	...	...	...
261	11,587	6	17	11,563	1,065	...	10,183	...	1	...	2	...	...	...	...	...
1,661	20,452	13	55	20,356	2,719	49	17,450	24	21	23	5	85	8	2	119	44	
81	726	1	...	725	48	...	671	...	5	...	1	...	...	...	...	...
2,467	94,318	343	3,011	90,744	29,429	1,583	64,531	1,446	213	47	173	3,228	293	34,491	14,590	9,67,762	3,01,461

8.—Return of Criminal Cases not cognizable by the

Serial number.	LAW UNDER WHICH PUNISHABLE.	DESCRIPTION OF CRIME.	Average institutions of preceding years.	Instituted by complainant during the year.	Taken up by Magistrate of his own motion.
1	2	3	4	5	6
1	115 117 118, 119	Abetment of offence not committed, &c. Abetting commission of offence by public, &c. Concealing design to commit offence	1 2 6	...............	...............
	Total ...		18	.....	.....
	CLASS I.—Offences against the State, Public Tranquillity, &c.				
2	121 to 130, 505	Offences against the State	26	1	4
3	137	Harbouring deserters by master of ship ... ..	.....	.....	1,328
4	172 to 190, 201 to 204, 213 to 215, 227, 228,	Offence against public justice	4,194	3,550	.....
5	161 to 169, 217 to 223	Offences by public servants	452	366	42
6	193 to 200, 205 to 211, 421 to 424,	False evidence, false complaints and claims, and fraudulent deeds and disposition of property	1,228	1,184	600
7	465 to 477	Forgery or fraudulently using forged docu- ments,	198	188	10
8	264 to 267	Offences relating to weights and measures	210	278	34
9	482 to 489	Making or using false trade marks	6	12	.....
10	149, 154 to 156, 160	Rioting, unlawful assembly, affray	315	211	19
	Total ...		6,608	5,790	2,046
	CLASS II.—Serious Offences against the Person.				
11	312 to 316	Causing miscarriage	231	148	4
12	370	Buying or disposing of slaves	5	10	.....
	Total ...		236	158	4
	CLASS III.—Serious Offences against Property.				
13	384 to 389	Extortion	1,659	1,244	3
	CLASS IV.—Minor Offences against the Person.				
14	345	Wrongful confinement	20	11	.....
15	352, 365, 358	Criminal force	49,545	47,764	50
	Total ...		49,566	47,775	50
	CLASS V.—Minor Offences against Property.				
16	417 to 420	Cheating	1,572	1,586	13
17	403, 404	Criminal misappropriation of property	1,120	1,775	26
18	409	Criminal breach of trust by public servants, bankers, &c.	110	86	7
19	426, 427, 431	Mischief (simple)	7,039	7,114	14
	Total ...		10,743	10,561	60

POLICE—continued.

Police during the year 1877, exclusive of Cases in Calcutta.

CASES.			PERSONS.							
Total of columns 5 and 6.	Number of cases in column 7 in which the police were employed to make inquiry.	Number of cases in which process issued.	Number of persons against whom process issued.	Actually appearing before the court, including pending from last year.	Discharged after appearance.	Acquitted		Convicted		Waiting trial at close of year.
7	8	9	10	11	12	By Magistrate.	By High or Sessions Court.	By Magistrate.	By High or Sessions Court.	17
.....
.....
.....
5	4	1	1	12	.....	2	.....	14	.....	.....
4,878	452	4,472	8,704	8,784	284	2,992	31	6,050	70	145
408	53	352	477	486	66	170	10	230	2	19
1,784	92	1,536	2,003	2,170	245	791	109	795	81	142
207	13	182	381	384	68	145	58	16	86	50
312	168	227	305	379	33	50	1	274	.....	19
12	2	11	25	25	1	3	.....	21	.....	.....
230	79	179	593	762	25	82	5	645	3	2
7,836	863	6,960	12,489	13,002	722	3,424	214	8,013	198	383
152	102	51	68	101	21	33	11	6	22	7
10	2	7	11	9	.....	9	.....	.....	.....	.....
162	104	58	79	110	21	42	11	6	22	7
1,247	92	818	1,134	918	136	444	19	27	1	67
11	.....	8	8	8	4	1	.....	3	.....	.....
47,814	1,254	35,788	43,987	24,435	2,823	9,052	16	12,223	1	316
47,825	1,254	35,796	43,995	24,443	2,827	9,053	16	12,226	1	316
1,599	101	1,018	1,231	915	180	434	16	250	5	30
1,801	1,000	713	896	926	106	297	2	490	3	28
93	13	98	103	112	11	52	4	32	8	5
7,128	411	4,971	6,763	4,736	454	2,205	15	1,890	4	164
10,621	1,525	6,800	8,993	6,689	751	2,988	37	2,662	20	227

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8.—*Return of Criminal Cases not cognizable by the*

Serial number.	LAW UNDER WHICH PUNISHABLE.	DESCRIPTION OF CRIME.	Average institutions of preceding years.	Instituted by complainant during the year.	Taken up by Magistrate of his own motion.
1	2	3	4	5	6
CLASS VI.—Other Offences not specified above.					
20	298	Offences against religion	946	109	1
21	490 to 492	Criminal breach of contract of service	228.2	91	.....
22	193 to 498	Offences relating to marriage	3,981.6	8,455	1
23	500 to 502	Defamation	865	826	1
24	504, 506 to 510	Intimidation and insult	1,139.8	1,172	1
25	271 to 276, 278, 284, 287, 298	Public and local nuisances	497.1	425	27
26	290.	Keeping a lottery office	1.8	3	.....
27	294A	Offences under Chapters XXXVII, XXXIX, XL, and XLI, C. P. C.	5,858.2	4,989	791
Total			12,572.6	11,071	886
Special laws—Offences under which are Not Cognizable by the Police.					
Regulation VI of 1819	} Ferries		25	16	.....
Act I (B.C.) of 1864	} Railway Acts		277.2	180	24
XXIII of 1854					
XXXI of 1867					
XIII of 1870					
XXV of 1873					
XX of 1856	} Chowkidaree Act		66	64	2
VI of 1870	} Abkaree Act		180.6	182	20
XXI of 1866	} Merchant Shipping Act		5.2	13	.....
I of 1859	} Breach of contract		297.4	299	.....
XIII of 1859	} Arms' Act		49.2	17	4
XXXI of 1860	} Police Act		543.2	378	68
V of 1861	} Jails' Act		29.4	18	5
II (B.C.) of 1864	} Cantonment Act		42.8	70	50
XXII of 1864	} Salt Acts		240.4	77	12
VII (B.C.) of 1864					
I (B.C.) of 1873	} Vaccination Act		10.4	7	2
IV (B.C.) of 1865	} Pledgers' and Mooktears' Act		6	7	8
XX of 1865	} Hackney Carriage Act		100.6	33	1
V (B.C.) of 1866	} Post Office Act		36.4	39	1
XIV of 1866	} Stamp Act		48.4	108	79
XVIII of 1869	} Court Fees' Act		.....	1	.....
VII of 1870	} Pound Act		6,440.8	6,224	17
I of 1871	} Emigration Act		99.6	14	39
VI of 1871	} Census Act		7.2	4	.....
XI (B.C.) of 1871	} Registration of Births and Deaths		24	75	22
IV (B.C.) of 1873	} Bengal Municipal Act		6,904	6,666	139
V (B.C.) of 1876	} Native Passenger Ships' Act		.....	1	.....
VIII of 1876	} Dramatic Performances' Act		.....	.....	.....
XIX of 1876	} Registration Act		32.8	56	5
III of 1877	} Mutiny Act		3.4	2	.....
.....	} Other special Laws		557.4	644	145
Total			16,125.4	15,139	639
GRAND TOTAL			97,514.2	91,738	5,629

POLICE—continued.

Police during the year 1877, exclusive of Cases in Calcutta—concluded.

CASES.			PERSONS.							
Total of columns 5 and 6.	Number of cases in column 7 in which the police were employed to make inquiry.	Number of cases in which process issued.	Number of persons against whom process issued.	Actually appearing before the court, including pending from last year.	Discharge after appearance.	Acquitted.		Convicted.		Waiting trial at close of year.
7	8	9	10	11	12	By Magistrate.	By High or Sessions Court.	By Magistrate.	By High or Sessions Court.	17
110	18	90	127	94	14	55	1	18	3	3
91	7	57	142	101	8	21	.....	71	1	.....
3,456	179	2,097	2,561	1,721	362	944	52	290	41	87
827	9	520	803	424	116	159	.....	136	.....	13
1,184	44	763	988	719	89	229	7	428	.....	4
453	119	403	606	612	14	112	.....	511	.....	4
3	.....	3	6	5	.....	4	.....	1	.....	.....
5,783	1,007	4,356	9,219	7,189	350	1,663	2	5,061	.....	165
11,907	1,413	8,289	14,452	10,925	863	3,115	62	6,514	45	276
16	8	16	27	26	.....	4	.....	92	.....	.....
154	53	143	178	178	3	13	.....	160	.....	2
66	8	60	138	134	.....	6	.....	127	.....	1
202	23	180	252	280	8	60	.....	209	.....	3
13	.....	13	24	24	.....	6	.....	18	.....	.....
209	.....	263	320	218	22	51	.....	144	.....	1
21	5	21	28	28	1	9	.....	16	.....	2
446	66	385	567	643	4	103	.....	533	.....	3
23	5	18	23	27	2	3	.....	21	.....	1
120	31	120	247	238	.....	68	1	166	.....	4
89	2	88	103	104	.....	17	.....	82	.....	5
9	1	9	45	45	2	3	.....	40	.....	.....
10	.....	5	5	9	1	2	.....	6	.....	.....
84	1	34	38	38	.....	8	.....	30	.....	.....
40	4	85	45	49	2	16	.....	25	4	2
187	2	179	324	317	9	53	.....	251	.....	4
1	.....	.....	.....	3	.....	1	.....	2	.....	.....
6,241	108	5,068	6,817	5,559	326	1,517	.....	1,039	3	44
58	6	30	42	44	1	23	.....	15	.....	.....
4	.....	4	4	.....	.....	.....	.....	.....	.....	.....
97	.....	96	112	111	4	14	.....	91	.....	2
6,796	83	6,475	8,720	9,035	313	1,293	.....	7,308	.....	61
1	.....	1	2	2	.....	1	.....	1	.....	.....
.....
56	.....	51	112	113	2	26	9	60	7	9
2	2	2	2	2	.....	.....	.....	2	.....	.....
789	16	646	1,306	1,430	2	423	.....	977	.....	28
15,769	419	13,942	19,485	16,658	702	3,729	14	12,085	14	172
95,307	5,670	72,663	1,00,687	72,745	6,052	22,786	373	41,786	391	1,448

7a.—Return of Criminal Cases cognizable

1	2	3	3a	4	4a	5	6	7	8	9	9a	10
Serial number.	LAW UNDER WHICH FURNISHABLE.	DESCRIPTION OF CRIME.	Average number reported during five preceding years.	Reported to have been committed during the year.	Number of cases not inquired into under section 117 of the Criminal Procedure Code.	Reported to have been committed in previous years and brought under inquiry during the year.	Investigated by police.					
							By police <i>suo motu</i> .	By order of the Magistrate on complaint, or of his own motion, in which no previous information was given to the police.	By order of the Magistrate after the police has refused to inquire.	Number of cases in columns 8 to 10 in which conviction was obtained.	Number of cases declared by Magistrate to be false and never to have occurred.	Pending at end of last year.
1	115	Abetment of offence not committed, &c.	...	...	...	...	...	...	...	...	...	...
	117	Abetting commission of offence by public, &c.	...	...	...	...	...	...	...	...	...	...
	118, 119	Conciliating design to commit offence.	...	...	...	...	...	...	...	...	...	...
	Total	a	...	...	...	...	...	...	...	...	...	...
	CLASS I.—Offences against the State, Public Tranquillity, Safety, and Justice.											
2	131 to 136 138	Offences relating to Army and Navy.	...	...	...	...	...	...	...	...	...	...
3	231 to 250, 260 to 263, 407 and 471.	Offences relating to coin, stamps, and Government notes.	20	25	...	...	25	...	...	7	6	...
4	212, 216	Habouring an offender.	...	...	...	...	...	...	...	...	...	...
5	221 to 226	Other offences against public justice.	40	34	...	...	38	...	...	14	...	...
6	143 to 153, 157, 158.	Rioting or unlawful assembly.	6	22	...	...	22	...	...	16	1	...
7	140, 170, 171	Personating public servant or soldier.	2	5	...	...	5	...	...	3	...	...
	Total		77	90	...	...	90	...	...	40	7	...
	CLASS II.—Serious offences against the Person.											
8	302, 303, 306	Murder { by things ... ..	...	...	...	...	...	...	...	...	...	...
9		by daemons ... ..	...	...	...	...	...	...	...	...	...	...
10		by robbers ... ..	...	...	...	...	...	...	...	...	...	...
11		by poison ... ..	...	1	...	...	1	...	...	1	...	...
12	307	Other murders	5	7	...	...	7	...	...	2	...	...
13		Attempts at murder	5	6	...	...	6	...	...	3	...	...
14	304, 309	Culpable homicide	6	4	...	...	4	...	...	2	...	...
15	376	Rape	11	4	...	...	4	...	...	2	1	...
16	377	Unnatural offences	5	7	...	...	7	...	...	...	3	...
17	317, 318	Exposure of infants or concealment of birth ... ..	...	2	...	...	2	...	...	1	...	...
18	305, 306, 309	Attempt at, and abetment of, suicide.	30	20	...	...	20	...	...	11	2	...
19	329, 331, 333	Grievous hurt for the purpose of extorting property or confession.	...	...	...	...	...	...	...	...	...	...
20	323, 326, 335	Grievous hurt	28	31	...	...	31	...	...	19	1	...
21	328	Administering stupefying drugs to cause hurt.	2	1	...	...	1	...	...	1	...	...
22	327; 330, 332	Hurt for purpose of extorting property or confession.	...	...	...	...	...	...	...	...	...	...
23	324	Hurt by dangerous weapon.	12	14	...	...	14	...	...	9	...	...
24	363 to 369	Kidnapping or abduction.	25	16	...	...	16	...	...	4	6	1

CE—continued.

re during the year 1877 in Calcutta and the Suburbs.

12	13	13a	14	15	16	17	a 18 b	19	20	21	22	23	24	25	26	27
PERSONS.													PROPERTY.			
By order of Magistrate.	Total.	Died, escaped, or transferred before trial.	Released without being brought before a Magistrate.	Number who actually appeared before a Magistrate.	Acquitted or discharged after appearance before a Magistrate.	Finally convicted (including persons ordered to give security for good conduct).	By Sessions or High Court.	Otherwise disposed of, e.g. died, transferred, &c. after commencement of trial.	In custody of police.	On bail.	Under trial before Magistrate.	Committed to Sessions.	Number of cases in which property was stolen.	Number of cases in which property was recovered.	Amount of property stolen.	Amount of property recovered.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Rs.	Rs.
...
...
...
...
...	22	...	2	20	11	...	9	...	...	...	...	...	...	...	...	...
3	40	...	2	38	19	...	19	...	...	...	...	...	...	...	...	...
20	140	...	4	136	51	...	76	...	...	...	9	...	...	...	...	...
...	4	...	...	4	1	...	3	...	...	...	...	...	...	...	...	...
23	206	...	8	198	82	...	107	...	...	...	9	...	...	...	...	...
...
...
...	3	...	...	2	1	...	1	...	...	...	...	...	...	...	...	...
...	8	...	...	7	...	...	4	...	...	...	1	...	...	...	...	...
...	5	1	...	5	1	...	2	...	...	...	1	...	1	...	...	...
...	4	...	...	4	1	...	3	...	...	...	...	...	...	...	...	...
1	6	...	2	4	2	...	...	...	...	...	...	...	...	...	...	...
...	2	...	...	2	...	...	1	...	...	...	...	...	...	...	...	...
...	17	...	2	14	3	...	11	...	...	...	...	...	...	...	...	...
...
...	46	...	...	46	12	...	22	...	...	...	...	...	...	...	...	...
...	2	...	...	2	...	...	...	...	...	...	6	...	...	...	...	...
...
...	15	...	...	15	5	...	10	...	...	...	...	...	...	...	...	...
4	10	...	1	9	5	1	...	3	...	...	...	...	3	1	151	100

7a.—Return of Criminal Cases cognizable

1	2	3	3a	4	4a	5	6	7	8	9	9a
Serial number.	LAW UNDER WHICH PUNISHABLE.	DESCRIPTION OF CRIME.	CASES.								
			Average number reported during five preceding years.	Reported to have been committed during the year.	Number of cases not inquired into under section 117 of the Criminal Procedure Code.	Reported to have been committed in previous years and brought under inquiry during the year.	Investigated by police.			Number of cases in columns 6 to 8 in which conviction was obtained.	Number of cases declared by Magistrate to be false and never to have occurred.
							By police <i>suo motu</i> .	By order of the Magistrate on complaint, or of his own motion, in which no previous information was given to the police.	By order of the Magistrate after the police has refused to inquire.		
25	346 to 348 ...	Wrongful confinement and restraint in secret or for purposes of extortion.	.....	.....	...	...	...	.....	...	...	...
26	372, 373... ..	Selling, letting, or unlawfully obtaining a woman for prostitution.	.....	.....	...	...	...	.....	...	...	...
27	371	Habitually dealing in slaves.	.....	.....	...	...	...	.....	...	...	...
28	353, 354, 356, 357.	Criminal force to public servant or woman, or an attempt to commit theft or wrongfully confine.	124	112	...	...	112	.....	...	77	...
29	304A, 338 ...	Rash or negligent act causing death or grievous hurt.	5	3	...	...	3	.....	...	2	...
		Total ...	258	228	...	...	228	.....	...	134	13
CLASS III.— <i>Serious Offences against Person and Property, or against Property only.</i>											
30	395, 397, 398 ...	Dacoity ... ..	.....	.....	...	...	...	.....	...	...	...
31	399, 402 ...	Preparation and assembly for dacoity.	.....	.....	...	...	...	.....	...	...	...
32	394, 397, 398... ..	Robbery by poison or stupefying drugs.	.....	.....	...	...	...	.....	...	...	...
		by other means in dwelling-house.	.....	.....	...	...	...	.....	...	...	...
33	392, 393 ...	Robbery on the highway between sunset and sunrise.	.....	3	...	...	3	.....	...	2	...
		Other robberies	.....	.....	...	...	...	.....	...	...	...
34	270, 281, 282, 430 to 435, 435 to 440.	Serious mischief and cognate offences.	4	10	...	...	10	.....	...	3	...
35	434, 455, 457 to 460.	Lurking house-trespass, or housebreaking with intent to commit an offence, or having made preparation for hurt.	230	191	...	...	191	.....	...	60	16
36	449 to 452 ...	House-trespass with a view to commit an offence, or having made preparation for hurt.	7	13	...	...	13	.....	...	8	1
37	412, 413 ..	Receiving stolen property by dacoity or habitually.	.....	.....	...	...	...	.....	...	...	...
		Total ...	241	217	...	...	217	.....	...	73	17

ICE—continued.

e during the year 1877 in Calcutta and the Suburbs—continued.

12	13	13a	14	15	16	17	a 18 b	19	20	21	22	23	24	25	26	27
PERSONS.													PROPERTY.			
By order of Magistrate.	Total.	Died, escaped, or transferred before trial.	Released without being brought before a Magistrate.	Number who actually appeared before a Magistrate.	By Magistrate.	By Sessions or High Court.	By Magistrate.	By Sessions or High Court.	Finally convicted (including persons ordered to give security for good conduct).	Otherwise disposed of, e.g. died, transferred, &c., after commencement of trial.	In custody of police.	Number pending at end of year.	Number of cases in which property was stolen.	Number of cases in which property was recovered.	Amount of property stolen.	Amount of property recovered.
															Rs.	Rs.
...
...
...
7	184	...	9	175	62	...	121	...	...	...	...	2	...	...	...	...
...	4	...	...	4	1	1	2	...	...	...	...	...	...	...	...	...
12	308	2	14	202	83	8	165	24	...	...	...	11	...	4	1	200
...
...
...
...
...	23	...	...	23	7	...	16	...	...	...	...	...	...	2	1	6
...
...	12	...	2	10	5	1	3	1	...	...	...	...	...	...	...	...
...	105	...	11	94	23	1	50	10	...	...	...	1	...	138	86	13,551
...	12	...	...	12	4	...	8	...	...	...	...	...	...	...	...	...
...
...	162	...	15	139	39	2	86	11	...	...	...	1	...	140	87	13,567

7a.—Return of Criminal Cases cognizable

1	2	3	3a	4	4a	5	6	7	8	9	9a
Serial number.	LAW UNDER WHICH PUNISHABLE.	DESCRIPTION OF CRIME.	CASES.								
			Average number reported during five preceding years.	Reported to have been committed during the year.	Number of cases not inquired into under section 117 of the Criminal Procedure Code. Reported to have been committed in previous years and brought under inquiry during the year.	Investigated by police.				Number of cases in columns 6 to 8 in which conviction was obtained.	Number of cases declared by Magistrate to be false and never to have occurred.
						By police <i>suo motu</i> .	By order of the Magistrate on complaint, or of his own motion, in which no previous information was given to the police.	By order of the Magistrate after the police has refused to inquire.	Number of cases in columns 6 to 8 in which conviction was obtained.		
CLASS IV.—Minor Offences against the Person.											
38	334	Hurt on grave or sudden provocation.	1	6	...	...	6	.....	...	6	...
38A	323	Hurt	161	274	2	...	273	.....	...	172	1
39	341 to 344 ...	Wrongful restraint and confinement.	33	35	...	...	35	.....	...	8	4
40	336, 337... ..	Rash act, causing hurt or endangering life.	19	15	...	...	15	.....	...	10	...
41	374	Compulsory labour	.....	.....	...	...	...	.....	...	...	...
	Total ...		214	330	2	...	328	.....	...	196	5
CLASS V.—Minor Offences against Property.											
42	453, 456 ...	Lurking house-trespass, or house-breaking.	94	38	...	...	38	.....	...	9	1
43	379 to 382 ...	Theft { of cattle ... of ordinary ...	80 3,435	20 3,481	...	...	20 3,357	.....	...	15 1,305	1 753
44	406 to 408 ...	Criminal breach of trust ..	319	300	16	...	277	7	...	79	51
45	411, 414... ..	Receiving stolen property	120	124	1	...	127	.....	...	52	5
46	447, 448... ..	Criminal or house-trespass	208	274	15	...	259	.....	...	198	3
47	461, 462 ...	Breaking closed receptacle	3	5	...	...	5	.....	...	3	...
	Total ...		4,679	4,246	156	...	4,083	7	...	1,571	814
CLASS VI.—Other offences not specified above.											
48	311, 400, 401 ...	Belonging to gangs of thugs, dacoits, robbers, and thieves.	.....	.....	...	...	...	.....	...	...	...
49	Chapter XIX, C. P. C.	Vagrancy and bad character.	8	21	...	...	21	.....	...	16	...
50	296 to 297 ...	Offences against religion...	.....	.....	...	...	...	.....	...	...	...
51		Cognizable offences under the Gambling Act.	287	139	...	...	139	.....	...	122	...
52		Excise Laws ...	180	167	...	...	167	.....	...	128	2
53		Railway Laws ...	106	86	...	...	86	.....	...	69	...
54		Salt and Customs Laws.	8	9	...	...	8	.....	...	7	...
55		Stage Carriage Act.	1,213	1,982	...	...	1,983	.....	...	1,515	8
56		Stamp Act ...	1	12	...	...	12	.....	...	12	...
57	269, 277, 279, 280, 283, 285 to 287, 289, 291 to 294, section 34 of Act V of 1861, and any other municipal or local laws.	Public and local nuisances	1,273	1,128	1	...	1,127	.....	...	1,025	5
	Total ...		3,076	3,545	1	...	3,543	.....	...	2,054	15

ICE—continued.

ice during the year 1877 in Calcutta and the Suburbs—continued.

12	13	13a	14	15	16	17	a 18 b	19	20	21	22	23	24	25	26	27	
PERSONS.													PROPERTY.				
By order of Magistrate.	Total.	Died, escaped, or transferred before trial.	Released without being brought before a Magistrate.	Number who actually appeared before a Magistrate.	Acquitted or discharged after appearance before a Magistrate.	Finally convicted (including persons ordered to give security for good conduct).	By Sessions or High Court.	By Sessions or High Court.	Otherwise disposed of, e.g. died, transferred, &c., after commencement of trial.	Number pending at end of year.	Before being put on trial.	Under trial before Magistrate.	Committed to Sessions.	Number of cases in which property was stolen.	Number of cases in which property was recovered.	Amount of property stolen.	Amount of property recovered.
...	0	...	...	6	...	...	5	1	...	...	...	...	...	...	...	Rs.	Rs.
22	378	1	8	369	130	...	235	1	...	...	...	3	...	...	...	...	...
14	45	...	6	39	21	...	12	...	...	...	...	6	...	...	...	...	...
...	15	...	...	15	4	...	11	...	...	...	...	...	...	...	...	...	...
...
30	414	1	14	429	155	...	263	2	...	...	...	9	...	...	...	...	...
...	12	...	...	12	3	...	9	...	...	...	...	...	...	...	...	...	...
...	23	...	...	23	4	...	19	...	...	...	...	...	...	17	17	237	190
2	2,535	32	117	2,406	822	8	1,530	35	...	...	...	11	...	2,562	1,787	94,275	47,612
18	200	4	12	184	102	...	75	6	...	...	...	1	...	...	...	...	...
1	182	1	49	132	50	...	75	2	...	...	...	6	...	...	...	...	...
138	320	2	12	306	114	...	190	...	1	...	...	1	...	...	...	...	...
...	3	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...
159	3,025	39	190	3,006	1,095	8	1,901	43	1	...	...	18	...	2,579	1,804	94,512	47,808
...
2	21	...	1	20	3	...	17	...	...	...	...	...	...	...	...	...	...
...
...	459	...	20	439	28	...	411	...	...	...	...	...	...	...	...	...	...
32	185	...	5	180	29	...	151	...	...	...	...	...	...	...	...	...	...
1	128	...	...	128	17	...	110	...	...	...	...	1	...	...	...	...	...
...	18	...	...	18	1	...	17	...	...	...	...	...	...	...	...	...	...
158	1,580	...	...	1,580	48	...	1,512	...	...	...	...	...	...	...	...	...	...
...	12	...	...	12	...	...	12	...	...	...	...	...	...	...	...	...	...
15	1,421	...	41	1,380	73	...	1,399	...	8	...	...	...	...	...	...	...	...
208	3,824	...	67	3,757	219	...	3,529	...	8	...	...	1	...	...	...	...	...

7a.—Return of Criminal Cases cognizable

1	2	3	3a	4	4a	5	6	7	8	9	9a	10
Serial number.	LAW UNDER WHICH PUNISHABLE.	DESCRIPTION OF CRIME.	CASES.									
			Average number reported during five preceding years.	Reported to have been committed during the year.	Number of cases not inquired into under section 117 of the Criminal Procedure Code.	Reported to have been committed in previous years and brought under inquiry during the year.	Investigated by police.			Number of cases in columns 8 and 9 which conviction was obtained.	Number of cases declared by Magistrate to be false and never to have occurred.	Pending at end of last year.
							By police <i>suo motu</i> .	By order of the Magistrate on complaint, or of his own motion, in which no previous information was given to the police.	By order of the Magistrate after the police has refused to inquire.			
58	Act IV (B.C.) of 1866, sections 12, 14, 15, 20.	Offences by police officers	5	11	...	...	11	.....	...	8	...	...
59	—section 31	Unlawful detention of women and children.	5	2	...	...	2	.....	...	2	...	...
60	—section 32	Lurking with intent to commit any criminal act.	258	54	...	...	54	.....	...	33	...	...
61	—section 33	Taking liquor into the Port, &c.	.....	1	...	...	1	.....	...	1	...	...
62	—section 34	Taking liquor or drugs into Jail.	.....	.....	...	...	.....	.....	...	...	...	...
63	—section 35	Keeping unlicensed boarding-house, &c.	2	4	...	...	4	.....	...	3	...	...
64	—section 40	Breach of police license ...	21	9	...	...	6	.....	...	5	...	...
65	—section 42	Harbouring deserters from Merchantmen.	2	2	...	...	2	.....	...	2	...	...
66	—sections 63, 65.	Breach of passenger boat registration.	748	698	...	...	698	.....	...	696	...	...
67	—sections 66, 68, 69, 70.	Miscellaneous offences in the streets.	5,219	4,707	...	...	4,707	.....	...	4,620	...	...
68	—section 81	Possessing suspicious property.	599	250	...	...	250	.....	...	...	112	...
69	.....	Other offences under Police Act.	305	376	...	...	44	.....	...	128	2	...
70	Act II (B.C.) of 1868, sections 5, 6, 7, 8, 9.	Offences by police officers	2	2	...	...	2	.....	...	1	1	...
71	—section 16	Lurking with intent to commit any criminal act.	52	12	...	...	12	.....	...	1	...	...
72	—section 18	Keeping unlicensed boarding-house.	.....	.....	...	...	.....	.....	...	...	...	...
73	—section 23	Breach of police license	.....	.....	...	...	.....	.....	...	...	...	...
74	—sections 40, 41.	Miscellaneous offences in the streets.	638	640	...	...	640	.....	...	685	1	...
75	.....	Other offences under Police Act.	7	1	...	...	1	.....	...	...	...	...
76	Act I of 1859, &c.	Shipping Acts—Offences under.	321	552	...	...	323	.....	...	344	1	...
77	Acts XXII of 1855, III (B.C.) of 1855, and III (B.C.) of 1867.	Port Acts— ditto	238	244	...	...	232	.....	...	234	...	...
78	.....	Mutiny Act— ditto	13	8	...	...	8	.....	...	7	...	...
79	Act XIV of 1868	Contagious Diseases' Act.	2,358	134	...	...	134	.....	...	780	...	...
80	Act I (B.C.) of 1869.	Cruelty to animals	1,101	1,026	...	...	1,903	.....	...	1,891	...	...
81	Act XXI of 1869	European vagrancy	33	27	...	...	27	.....	...	17	...	...
82	Act II of 1864	Jail Act	1	3	...	...	3	.....	...	2	...	...
Total			12,234	10,870	...	...	10,273	.....	...	9,360	117	...
GRAND TOTAL			20,779	18,526	159	...	18,762	7	...	14,328	990	4

CE—continued.

during the year 1877 in Calcutta and the Suburbs—continued.

12	13	13a	14	15	16	17	a 18 b	19	20	21	22	23	24	25	26	27
PERSONS.													PROPERTY.			
By order of Magistrate.	Total.	Died, escaped, or transferred before trial.	Released without being brought before a Magistrate.	Number who actually appeared before a Magistrate.	Acquitted or discharged after appearance before a Magistrate.	Finally convicted (including persons ordered to give security for good conduct).	Number pending at end of year.	Otherwise disposed of.	In custody of police.	On bail.	Under trial before Magistrate.	Committed to Sessions.	Number of cases in which property was stolen.	Number of cases in which property was recovered.	Amount of property stolen.	Amount of property recovered.
					By Magistrate.	By Sessions or High Court.		By Magistrate.	By Sessions or High Court.						Rs.	Rs.
...	8	...	...	8	...	...	8	...	...	...	...	...	...	...	...	...
12	2	...	...	2	...	...	2	...	...	...	...	...	...	...	...	...
...	61	...	...	61	26	...	35	...	...	...	...	...	...	...	...	...
...	1	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...
...
5	5	...	...	5	1	...	4	...	...	...	...	...	...	...	...	...
7	8	...	...	8	2	...	6	...	...	...	...	...	...	...	...	...
...	3	...	...	3	...	...	3	...	...	...	...	...	...	...	...	...
...	520	...	...	820	3	...	817	...	...	...	...	...	...	...	...	...
166	6,013	...	5	6,011	92	...	5,919	...	...	...	...	...	...	...	...	...
...	20	...	3	17	17	...	...	...	...	...	...	...	...	...	...	...
149	211	...	...	211	82	...	123	...	...	...	1	...	...	...	...	...
...	1	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...
...	12	...	9	3	2	...	1	...	...	...	...	...	...	...	...	...
...
...	984	1	23	45	45	...	915	...	...	...	1	...	...	...	...	...
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
372	944	...	204	740	123	...	617	...	...	...	...	...	...	...	...	...
10	376	...	...	376	32	...	344	...	...	...	...	...	...	...	...	...
...	10	...	...	10	1	...	9	...	...	...	...	...	...	...	...	...
...	1,831	...	824	1,007	9	...	998	...	...	...	...	...	...	...	...	...
20	2,735	...	...	2,735	32	...	2,703	...	...	...	...	...	...	...	...	...
...
...	8	...	...	28	7	...	19	...	...	...	3	...	...	...	...	...
...	...	...	...	8	1	...	2	...	...	...	...	...	...	...	...	...
731	14,080	1	1,048	13,011	475	...	12,531	...	...	...	5	...	...	...	...	...
469	22,309	43	1,374	20,802	2,148	18	18,582	80	9	...	51	...	2,733	1,892	1,08,269	63,149

8a.—Return of Criminal Cases not cognizable by the

Serial number.	LAW UNDER WHICH PUNISHABLE.	DESCRIPTION OF CRIME.			
			Average institutions of pre- ceding year.	Instituted by complainant during the year.	Taken up by Magistrate of his own motion.
1	2	3	4	5	6
1	115	Abetment of offence not committed, &c. ...	.....	1	.....
	117	Abetting commission of offences by public, &c. ...	.....	.....	.....
	118, 119	Concealing design to commit offence ...	.....	.....	.....
		Total ...	.....	1	.....
	CLASS I.—Offences against the State, Public Tranquillity, &c.				
2	121 to 130, 505	Offences against the State ...	.....	.....	.....
3	137	Harbouring deserters by master of ship ...	.....	.....	.....
4	172 to 190, 201 to 204, 213 to 215, 227, 208, ...	Offences against public justice ...	30	35	.....
5	161 to 168, 217 to 223 ...	Offences by public servants ...	28	29	.....
6	193 to 200, 205 to 211, 229, 241 to 424 ...	False evidence, false complaints and claims... ..	61	28	.....
7	405 to 477	Forgery or fraudulently using forged documents, ...	10	23	.....
8	264 to 267	Offences relating to weighing and measuring ...	19	48	.....
9	482 to 489	Making or using false trade-marks ...	1	1	.....
10	149, 154 to 156, 160 ...	Rioting, unlawful assembly, affray ...	7	32	.....
		Total ...	165	196	.....
	CLASS II.—Serious Offences against the Person.				
11	312 to 316	Causing miscarriage ...	.....	1	.....
12	370	Buying or disposing of slaves ...	.....	.....	.....
		Total ...	.....	1	.....
	CLASS III.—Serious Offences against Property.				
13	384 to 389	Extortion ...	6	9	.....
	CLASS IV.—Minor Offences against the Person.				
14	323	Hurt ...	.....	.....	.....
15	345	Wrongful confinement ...	.....	.....	.....
16	352, 355, 358	Criminal force ...	2,506	2,865	.....
		Total ...	2,506	2,865	.....
	CLASS V.—Minor Offences against Property.				
17	417 to 420	Cheating ...	146	89	.....
18	403, 404	Criminal misappropriation of property ...	51	48	.....
19	409	Criminal breach of trust by public servants, bankers, &c. ...	2	2	.....
20	426 to 429, 434	Mischief (simple) ...	139	158	.....
		Total ...	338	297	.....

POLICE—continued.

Police during the year 1877 in Calcutta and the Suburbs—continued.

CASES.			PERSONS.							
Total of columns 5 and 6.	Number of cases in column 7 in which the police were employed to make inquiry.	Number of cases in which process issued.	Number of persons against whom process issued.	Actually appearing before the court, including pending from last year.	Discharged without trial after appearance.	Acquitted.		Convicted.		Waiting trial at close of year.
7	8	9	10	11	12	By Magistrate.	By High or Sessions Court.	By Magistrate.	By High or Sessions Court.	17
.....	.....	1	2	2	.....	.....	.....	2	.....	.....
.....	.....	1	2	2	.....	.....	.....	2	.....	.....
13	12	24	27	38	.....	16	.....	22	.....	.....
9	24	12	14	36	.....	14	.....	22	.....	.....
11	4	23	34	32	1	13	4	8	3	3
4	17	10	16	20	.....	8	3	8	.....	1
1	3	46	50	40	1	6	.....	33	.....	.....
5	29	5	17	83	.....	29	1	54	1	.....
43	90	120	158	232	2	87	8	139	12	4
1	1	1	1	1	.....	1	.....	.....	.....	.....
1	1	1	1	1	.....	1	.....	.....	.....	.....
5	7	7	12	17	.....	9	.....	7	.....	1
987	155	2,709	3,953	2,100	19	997	.....	1,083	.....	1
987	155	2,709	3,953	2,100	19	997	.....	1,083	.....	1
22	67	87	46	76	.....	45	.....	25	3	3
7	36	15	18	54	.....	19	.....	34	.....	1
.....	2	.....	.....	2	.....	1	1	.....	.....	.....
28	84	76	136	154	6	56	.....	92	.....	.....
57	189	128	290	286	6	121	1	151	3	4

D.—

8a.—Return of Criminal Cases Cognizable by the

Serial number.	LAW UNDER WHICH PUNISHABLE.	DESCRIPTION OF CRIME.	Average institutions of pre- ceding years.	Instituted by complainant during the year.	Taken up by Magistrate of his own motion.
1	2	3	4	5	6
CLASS VI.—Other Offences not specified above.					
21	493 to 498 ...	Offences relating to marriage ...	98	59	.....
22	298 ...	Offences against religion ...	1	1	.....
23	490 to 492 ...	Criminal breach of contract of service ...	5	13	.....
24	500 to 502 ...	Defamation ...	35	31	.....
25	501, 506 to 510 ...	Intimidation and insult ...	289	374	.....
26	271 to 279, 278, 284, 287, 288, 290, 294A ...	Public and local nuisances ...	2,772	2,911	.....
27	294A ...	Keeping a lottery office, &c. ...	.....	1	.....
28	... ..	Offences under Chapters XVIII, XX, XXI, and XXII, C. P. C. ...	125	76	.....
Total ...			3,325	3,469	.....
29	Act V of 1869 ...	Indian Articles of War ...	.....	.....	.....
30	Act V of 1857 ...	Gas Company's Act ...	6	16	.....
31	Act XIII of 1859 ...	Woman's Contract Act ...	143	191	.....
32	Act VIII of 1860 ...	Telegraph Act ...	.....	.....	.....
33	Act VI (B.C.) of 1862, &c. ...	Conservancy Acts ...	14,067	17,983	.....
34	Act II (B.C.) of 1863 ...	Furnace Act ...	.....	.....	.....
35	Acts V (B.C.) of 1862, VI (B.C.) of 1864, and I (B.C.) of 1868 ...	Steam-boilers' Acts ...	.....	.....	.....
36	Acts XXXI of 1860 and VI of 1866 ...	Arms' Acts ...	7	5	.....
37	Act XIV of 1866 ...	Post Office Act ...	8	8	.....
38	Act XIX of 1859 ...	Apprentices' Act ...	.....	.....	.....
39	Act X of 1866 ...	Indian Companies' Act ...	3	1	.....
40	Acts XI of 1836 and XXV of 1867 ...	Printing Press Acts ...	.....	4	.....
41	... ..	Income Tax Act ...	.....	11	.....
42	... ..	Fire Brigade Act ...	.....	.....	.....
43	... ..	Emigration Act ...	1	3	.....
44	... ..	Pound Act ...	.....	1	.....
45	... ..	Registration of Births and Deaths ...	.....	2	.....
Total ...			14,235	18,225	.....
GRAND TOTAL ...			20,575	25,060	.....

POLICE—concluded.

Police during the year 1877 in Calcutta and the Suburbs—concluded.

CASES.			PERSONS.							
Total of columns 5 and 6.	Number of cases in column 7 in which the police were employed to make inquiry.	Number of cases in which process issued.	Number of persons against whom process issued.	Actually appearing before the court, including pending from last year.	Discharged without trial after appearance.	Acquitted.		Convicted.		Waiting trial at close of year.
7	8	9	10	11	12	By Magistrate.	By High or Sessions Court.	By Magistrate.	By High or Sessions Court.	17
34	15	50	72	68	13	42	.....	11	.....	3
1	1	1	1	1	.....	1	.....	.....	.....	.....
5	2	13	22	16	6	.....	.....	10	.....	.....
24	3	27	45	37	5	21	.....	11	.....	.....
124	4	365	564	261	6	120	.....	135	.....	.....
3	2,889	23	36	3,872	.....	112	.....	3,759	.....	1
76	.....	1	1	1	.....	.....	.....	27	.....	.....
.....	12	61	85	44	11	6	.....	1	.....	.....
207	2,926	541	826	4,306	41	392	.....	3,954	.....	3
.....
88	4	13	16	15	.....	4	.....	11	.....	.....
.....	2	189	202	135	10	35	.....	90	.....	.....
1,492	484	17,500	17,500	8,578	.....	1,598	.....	6,878	.....	102
.....
.....	4	1	2	3	1	.....	.....	2	.....	.....
.....	5	3	3	8	.....	3	.....	4	1	.....
.....
.....	.....	1	1	1	.....	.....	.....	1	.....	.....
.....	.....	4	4	3	.....	.....	.....	3	.....	.....
.....
.....
.....	10	1	1	11	.....	.....	.....	11	.....	.....
2	.....	3	4	3	.....	.....	.....	3	.....	.....
1	1	1	3	3	.....	2	.....	1	.....	.....
2	2	2	2	2	.....	.....	.....	2	.....	.....
1,585	512	17,717	17,738	8,762	11	1,612	.....	7,403	1	102
2,945	3,880	21,224	22,890	15,720	79	3,159	.....	12,342	16	115

F.—MARINE 1.

Statement showing the various Government Ships and Vessels employed under the Government of Bengal during the year 1877-78.

DETAIL OF VESSELS.	Number of officers.	Number of men.	Total annual cost.*	*Total annual earnings.	REMARKS.
<i>Sea-going Vessels.</i>			Rs.		
"Undaunted," steamer ...	5	54	27,869	On river service.
"Celerity," " ..	2	6,140	Out of commission; no fixed crew.
<i>River-going Vessels.</i>					
"Coleroon," pilot-vessel ...	3	35	16,175	} Pilot-vessels at the cruising station.
"Cassandra," " ..	3	35	16,123	.....
"Chinsurah," " ..	3	35	15,464	.....
"Star," floating light-vessel ...	3	27	10,700	.....
"Comet," " " ..	3	26	12,010	} Up to September 1877 only.
"Planet," " " ..	3	26	11,681	.....
"Meteor," " " ..	3	26	12,263	.....
"Mermoid," floating light-vessel.	3	26	13,268	.....
"Canopus," floating light-vessel.	3	26	9,563	} Light duty.
"Foam," floating light-vessel	3	26	3,054	.....
"Dolphin," buoy-vessel ...	3	31	15,161	.....
"Kedgerie," river-surveying vessel.	5	32	10,583	.....
"Marie," assistant river-surveying vessel.	2	21	5,210	} Ditto.
"Clyde," (steamer) river-surveying vessel.	6	44	15,956	.....
Survey tender	2	16	4,662	.....
No. 10 steamer ... ..	...	14	1,063	.....
"Vulcan," anchor-vessel ...	1	24	5,103	}
Reserve vessel	1	3	1,277	.....
State yacht and boats, Lieutenant-Governor's.	.....	38	4,376	.....
Boats Nos. 6, 10, 2, and 11, 8, dak boat and boat leads-men.	.....	111	5,273	.....
Bholias and Pansways	27	2,056	

* Cost of establishment and contingencies only.

F.—MARINE 2.

Statement showing the number of officers and men employed otherwise than in Government vessels under the Government of Bengal during the year 1877-78.

DESCRIPTION OF ESTABLISHMENT.	Number of officers.	Number of men.	Total annual cost.*	Total annual earnings.
<i>Superintending Establishment—</i>			Rs.	Rs.
Port Officer and establishment	3	51	64,386†	.....
<i>Pilot Establishment—</i>				
Government salaried	5	.....	44,163	} 10,66,858
Ditto free	37	.....	3,69,150	
Licensed	25	.....	1,79,682	
Ditto leadsmen	5	.....	12,842	} 9,500
Leadsmen apprentice	10	.....	4,135	
<i>Any other Establishment—</i>				
Marine Court	2	.....	3,430	.....
Saugor light-house	2	50	6,045	.....
Cowcolly ditto	1	4	1,215	.....
Tidal semaphores ... ..	.....	28	2,766	.....
Seventh crew ... ..	.....	20	6,970	.....
Examiners of masters, mates, and engineers ...	9	.....	1,215	.....

* Cost of establishment and contingencies only.

† Including Agent for Transports and Government Consignments.

PART III.

STATISTICS OF PRODUCTION AND DISTRIBUTION.

A.—FINANCE.

1.—Account of the Gross and Nett Revenues of the Provinces of Bengal for the year 1877-78.*

SOURCES OF INCOME.	Gross receipts.	Refunds and drawbacks.	CHARGES AGAINST INCOME.			Nett receipts.
			Salaries and establishments.	Allowances and assignments payable under treaties and engagements.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Land Revenue	3,60,62,097	18,426	30,29,461	.....	.....	.....
Forest	4,26,227	1,035	2,61,878	.....	.....	.....
Excise on spirits and drugs	68,67,898	4,652	3,05,829	.....	.....	.....
Assessed taxes	97	12	.....	.....	.....	.....
Provincial Rates	21,05,038	26,363	10,270	.....	.....	.....
Tributes and contributions from Native States ... ..	.....	.....	.....	.....	.....	.....
Total Territorial	4,68,54,347	50,428	36,07,438	23,47,952	59,55,390	4,68,55,329
Customs	1,18,68,996	1,74,333	7,15,792	.....	7,15,792	1,09,78,871
Salt—						
Duty on imported salt	2,56,56,837	.....	.....	.....	.....	.....
Excise duty	10,06,765	.....	.....	.....	.....	.....
Miscellaneous	2,72,408	.....	.....	.....	.....	.....
Total	2,69,36,010	3,17,833	1,41,963	.....	1,41,963	2,68,76,214
Opium—						
Cost of Abkaree Opium	15,71,114	.....	.....	.....	.....	.....
Government sales, &c.	6,27,57,665	.....	.....	.....	.....	.....
Total	6,43,28,809	1,181	2,65,71,395	.....	2,65,71,395	3,77,56,233
Stamps	1,08,14,517	1,29,217	2,47,728	.....	2,47,728	1,01,37,572
Post Office	18,54,201	13	23,24,686	.....	23,24,686	—4,70,108
Law and Justice—						
Refunds... ..	.....	.....	.....	.....	.....	.....
Real Fines, &c.	21,55,019	1,25,137	.....	.....	.....	20,29,882
Police—						
Refunds... ..	.....	.....	.....	.....	.....	.....
Real Fines, &c.	91,916	782	.....	.....	.....	91,132
Marine—						
Refunds ... ..	.....	.....	.....	.....	.....	.....
Real Fines, &c.	17,03,748	1,120	.....	.....	.....	17,02,628

A.—FINANCE—continued.

1.—Account of the Gross and Nett Revenues of the Provinces of Bengal for the year 1877-78—concluded.

SOURCES OF INCOME.	Gross receipts.	Refunds and drawbacks.	CHARGES AGAINST INCOME.			Nett receipts.
			Salaries and establishments.	Allowances and assignments payable under treaties and engagements.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Education	5,19,604	39,509	.....	.....	.....	4,80,095
Interest	8,39,570	.....	.....	.....	.....	8,39,570
Receipts in aid of superannuation, retired, and compassionate allowances	71,102	.....	.....	.....	.....	71,102
Gain by exchange on transactions with London	35,165	.....	.....	.....	.....	35,165
Miscellaneous	14,28,079	3,10,135	.....	.....	.....	11,17,944
Public works	1,01,571	.....	.....	.....	.....	1,01,571
Irrigation	4,94,772	.....	.....	.....	.....	4,94,772
State Railways	3,45,236	.....	.....	.....	.....	3,45,236
Total	16,99,47,662	11,49,630	3,56,09,602	23,17,952	3,59,56,954	13,28,41,018
Nizamut Stipend Fund	22,26,263	.....	.....	.....	.....	22,26,263
Municipalities	12,52,908	.....	.....	.....	.....	12,52,908
<i>Local Funds.</i>						
Local Funds, including Provincial Reserve Fund	2,80,670	.....	.....	.....	.....	.....
Trust Funds	1,02,554	.....	.....	.....	.....	.....
Total	63,83,204	.....	.....	.....	.....	63,83,204
Gross Receipts	17,98,10,037	11,49,630	3,56,09,602	23,17,952	3,59,56,954	14,27,05,393

A.—FINANCE—continued.

2.—Account of the Expenditure from the Nett Income of the Province of Bengal for the year 1877-78.

SUBJECT OF EXPENDITURE.	AMOUNT.		CAUSE OF INCREASE OR DECREASE.
	Past year, 1876-77.	Present year, 1877-78.	
	Rs.	Rs.	
Interest on Service Fund and other accounts ...	1,40,513	1,12,136	
Civil and Political Salaries and Establishments ...	28,27,739	27,58,405	
DETAILS.	1876-77.	1877-78.	
	Rs.	Rs.	
Administration ...	13,66,708	13,59,348	Post of Accountant-General held by a officer, smaller payments drawn by the tenant Governor's Private Secretary, increase under Board of Revenue and Commissioners, against increase under Government Secretariat.
Minor Departments ...	2,03,154	1,86,741	Payments for the Bengal Gazetteer and decrease under emigration and plantations.
Ecclesiastical ...	1,98,900	1,97,955	
Political Agencies ...	3,953	600	
Medical ...	10,55,724	10,13,761	Due to payments in 1876-77 on acc salary of officers of other presidency Decrease under medical establishment, schools, hospitals and dispensaries Sanitary Commissioners, against under vaccination and Lunatic Asylums
	28,27,739	27,58,405	
Civil and Political contingencies ...	11,78,281	11,09,452	
DETAILS.	1876-77.	1877-78.	
	Rs.	Rs.	
Administration ...	2,18,953	2,04,096	Smaller payments on account of Lieut Governor's tour expenses, against under Civil Secretariat, Board of and Commissioners.
Minor Departments ...	1,62,666	91,563	Payments in 1876-77 on account of contribution for lands taken for the Garden at Alipore.
Ecclesiastical ...	36,175	31,245	Smaller miscellaneous payments.
Political Agencies ...	1,01,983	65,151	Special payments made last year on of Imperial Assemblage at Delhi on the January 1877 and local rejoicings, and increase under Durbar presents.
Medical ...	6,55,198	7,13,397	Increase under hospitals and dispen medical establishments (provincial). Asylums, and grants for medical p against decrease under vaccination, schools and Sanitary Commissioner.
	11,78,281	11,09,452	
Judicial charges, Courts ...	87,83,422	87,61,362	Decrease under High Court Judges, Jute Branch; Justices of the Peace, C Sessions Courts, Courts of Small rents, rates, and taxes and petty const and repairs, against increase under Court, Original Branch; Coroner's Criminal Courts, Jails, Registrars Law Officers.
Police ...	39,98,194	41,87,342	No payment to the Calcutta Municipal account of Government contribution 1876-77, and larger expenditure under police, against decrease under superi ence and district executive force.
Marine ...	29,04,447	21,68,559	Special adjustment in 1876-77 for the famine vessels.

A.—FINANCE—concluded.

—Account of the Expenditure from the Nett Income of the Province of Bengal
for the year 1877-78—concluded.

SUBJECT OF EXPENDITURE.	AMOUNT.		CAUSE OF INCREASE OR DECREASE.
	Past year, 1876-77.	Present year, 1877-78.	
	Rs.	Rs.	
... ..	24,47,958	25,21,921	Increase under inspection, English college and madrasah, Government schools, technical schools, scholarships, and miscellaneous, against decrease under normal schools or training colleges, and grants for the encouragement of literature.
ry and Printing	4,62,440	5,03,145	Chiefly to larger expenditure by the Bengal Secretariat Press.
lough and absentee allowances	5,602	20,365	Larger number of officers drew their allowances from Bengal Treasuries in 1877-78.
uation, retired, and compassionate nces	6,36,797	7,97,690	Chiefly due to special payments to Military Officers in civil employ in the North Western Provinces and Punjab as bonus to retire from the service. There is also a slight increase under superannuation and compassionate allowances.
exchange	1,268	81	
neous	4,41,431	3,73,962	Principally under miscellaneous and unforeseen charges, donations for charitable purposes, reward for killing wild animals, charges for remittance of treasure, &c.
orks Ordinary	25,75,727	25,15,323	
... ..	...	7,02,858	} Transferred to Provincial Services in 1877-78.
ilways ... ..	...	2,92,430	
of Local Government increased* ... ..	...	...	A new head opened in 1877-78 to show the cash balance of the year under Provincial Services.
utions to District Road Funds	1,81,419	...	
nt for Provincial Services	1,11,11,574	...	This mode of adjustment has been discontinued.
Relief	8,16,844	...	
Total	3,85,43,286	...	
st Stipend Fund	15,86,201	14,10,880	Smaller payments under contingencies and miscellaneous and stipends and allowances of the Nazamut, against an increase under construction and repairs of buildings. There was also no payment in 1877-78 on account of expenses in connection with the Nawab Nazim's debt.
alities	11,17,734	12,00,534	Principally under District Road Fund.
LOCAL FUNDS.			
unds, including Provincial Reserve Fund	48,80,579	50,63,915	
unds	1,48,481	87,726	Largely due to the transfer of the Hooghly Emam-barah Fund to personal deposit, also smaller payments under Boat Registry Fund, Rungpoor School Fund, and Calcutta Female Orphan House.
Total	43,21,060	51,51,641	
Grand Total*	4,57,76,281	...	
Surplus*	9,49,70,441	...	

RE.—The difference between the actuals of 1876-77 reported last year and those now entered is due to transfer adjustment made on the authority of the Comptroller-General after the close of the accounts for March 1878. The Accountant-General was unable to furnish correct figures under these heads up to the date of the publication of

B.—PUBLIC WORKS.

1.—Statement of Expenditure in the Public Works Department in the Province of Bengal during the year 1877-78.

CLASS OF WORKS.	TOTAL EXPENDITURE, INCLUDING ESTABLISHMENT.					Cost of establishment.
	Capital spent on works yielding income.	Maintenance of works yielding income.	Capital spent on works both remunerative and non-remunerative.	Maintenance of works both remunerative and non-remunerative.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
IMPERIAL—						
<i>Military and other services—</i>						
Military ... ..	.....	.....	15,388	27,274	42,662	8,214
Civil buildings ... ..	.....	.....	2,32,605	1,61,526	3,97,131	98,140
Miscellaneous public improvements ... ..	.....	.....	2,586	10,191	12,777	3,400
	.....	.....	2,50,579	2,01,591	4,52,570	1,10,144
<i>Irrigation—</i>						
Agricultural, ordinary	34,617	7,02,857	70,850	11,48,472	12,19,823	4,33,820
Ditto, extraordinary	23,80,731	.....	23,80,731	.....	23,80,731	6,11,140
	24,15,148	7,02,857	24,51,581	11,48,472	36,00,053	10,45,000
Total Imperial	24,15,318	7,02,857	27,02,160	13,50,163	40,52,623	11,57,169
PROVINCIAL PROPER—						
Civil buildings ... ..	.....	.....	7,61,278	4,20,914	11,88,192	3,55,879
Communications ... ..	.....	.....	1,06,391	10,61,222	12,27,613	4,11,504
Miscellaneous public improvements ... ..	.....	.....	96,198	351	96,549	32,602
	.....	.....	10,23,867	14,88,487	25,12,354	8,02,985
PROVINCIAL RESERVE—						
Civil buildings ... ..	.....	.....	.....	.....	.....	.....
Communications	2,649	2,86,804	9,064	3,45,144	3,51,208	1,18,667
Miscellaneous public improvements ... ..	.....	.....	.....	26,585	26,585	5,314
	2,649	2,86,804	9,064	3,71,729	3,80,793	1,53,971
Total Provincial	2,649	2,86,804	10,32,931	18,60,216	28,93,117	9,56,956
LOCAL FUNDS—						
Civil buildings ... ..	.....	.....	2,860	54,114	56,974	11,214
Agricultural ... ..	.....	.....	.....	.....	.....	.....
Communications ... ..	.....	.....	.....	7,916	7,916	1,559
Miscellaneous public improvements ... ..	.....	.....	15,139	911	16,050	3,443
Total Local funds ... ..	.....	.....	17,999	62,941	80,940	16,216
DISTRICT ROAD FUNDS— ... ..	.....	.....	13,01,530	18,65,213	31,66,743	5,20,818
Total Public works	24,17,997	9,89,661	50,54,620	51,38,833	1,01,93,453	26,51,189
RAILWAYS—						
Guaranteed ... ..	.....	.....	1,98,904	.....	1,98,904	1,28,512
GRAND TOTAL	24,17,997	9,89,661	52,53,524	51,38,833	1,03,92,357	27,79,731

B.—PUBLIC WORKS—concluded.

2.—Statement showing the Income and Expenditure of Reproductive Works in the Public Works Department in the Province of Bengal during the year 1877-78.

NAMES OF LARGE WORKS OR CLASS OF MINOR WORKS.	Whether received from Native Government or wholly made by British Government.	Capital expended by British Government in previous years.	RECEIPTS AND EXPENDITURE FOR THE YEAR.				
			Gross income received in cash.	Outlay on account of capital.	Cost of repairs and maintenance.	Interest on capital at 4 per cent.	Net surplus or deficit.
IRRIGATION—		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>Orissa canal and irrigation project—</i>							
Mahanuddy series ...		1,43,18,051	1,61,107	2,51,689	2,16,072	6,51,155	— 7,06,120
Brabhanee and Byturnee series ...		29,90,344	...	2,20,818	.....	1,39,595	— 1,39,595
		1,73,08,395	1,61,107	* 4,72,507	2,16,072	7,90,550	— 8,15,515
<i>Midnapore canal and irrigation project—</i>							
Midnapore series...		68,34,886	1,70,093	2,16,887	2,03,814	* 3,13,234	3,16,955
Total canal series ...		17,93,905	62,280	.....	59,564	80,268	— 48,552
		86,18,791	2,32,373	2,16,887	2,34,378	3,93,502	— 3,95,507
<i>Dumoodur canal and irrigation project—</i> ...		1,57,101	.....	2,901	.....	7,112	— 7,112
<i>Tirhoot canal and irrigation project—</i> ...		5,02,006	.....	32,901	.....	23,192	— 23,192
<i>Hooghly canal and irrigation project—</i> ...		1,43,339	.....	— 371	.....	6,139	— 6,139
<i>Sone canal and irrigation project—</i>							
Eastern main canal series		64,10,050	13,691	4,30,009	89,061	2,08,286	— 3,73,653
Western ditto ...		1,09,55,687	87,601	12,55,514	1,63,344	5,20,932	— 5,96,677
		1,73,93,717	1,01,292	16,91,323	2,52,407	8,19,218	— 9,70,333
Total Irrigation ...		4,41,23,610	1,94,772	24,13,548	7,02,857	20,39,713	— 22,17,598
PROVINCIAL—							
Calcutta and eastern canals		36,03,320	4,41,268	2,619	1,91,580	1,62,149	87,479
Nudda rivers ...		2,16,427	3,24,940	.....	95,224	9,739	2,19,977
Total Provincial ...		38,19,747	7,66,148	2,649	2,86,804	1,71,888	3,07,456
GRAND TOTAL ...		4,79,43,387	12,60,920	24,17,397	9,89,661	22,11,601	— 19,40,312

* Includes Rs. 6,379, amount of capitalized abatement of land revenue.

C.—RAILWAYS—1877.

NAME OF RAILWAY.	PASSENGERS DURING THE YEAR.					Total.	Receipts from passengers, &c.		Receipts from merchandise, &c.		Receipts from railway materials.	Total receipts.		Working expenses.		Net profits.		Number of European staff.		Number of native staff.		Total capital expended.
	1st Class	2nd Class.	Intermediate.	3rd Class.	No.		Rs.	No.	Rs.	No.		Rs.	No.	Rs.	No.	Rs.	No.	Rs.				
East Indian Railway, Main Line	1,279 35	45,967	129,053	560,317	6,637,702	7,422,071	96,73,722	2,83,52,245	20,321	3,97,02,792	1,23,05,158	2,73,07,034	1,529	37,833	23,72,55,294							
East Indian Railway, Jubbulpore Line	223 57	5,447	23,437	5,473	319,493	353,850	10,81,223	29,57,310	4,326	46,48,997	17,32,697	29,16,270			3,69,18,150							
Eastern Bengal Railway	158 89	39,553	49,544	396,204	1,457,630	1,902,931	12,85,016	29,23,367	3,031	43,27,333	19,92,511	23,44,522	203	6,062	3,30,24,862							
Northern Bengal State Railway	134	113	631	.....	25,695	26,439	16,008	25,717	6,992	43,717	68,347	19,630	83	823	1,43,83,971						
Tirhoot State Railway	79	2,763	5,440	.....	340,390	348,391	1,53,815	1,43,312	2,430	2,99,557	2,09,252	90,305	25	621	44,91,006						
Calcutta and South-Eastern State Railway	23	201	3,573	.....	551,533	553,397	79,553	38,934	.....	1,18,457	96,848	21,639	4	250	6,90,116						
Nalhati State Railway	27 1/2	1,02 1/2	6,722	.....	112,973	120,719	55,622	33,583	.....	89,455	89,576	421	1	168	2,71,690						

N.B.—Each return ticket has been counted as equivalent to 2, and season-ticket to 40 passengers.

D.—MARINE I.

Statement showing the various Government ships and vessels employed under the Government of Bengal in the year 1877-78.

DETAIL OF VESSELS.	Tonnage of each vessel.	Horse-power.	Number of officers.	Number of men.	Total annual cost.*	Total annual earnings.	REMARKS.
<i>Sea-going vessels.</i>					Rs.		
"Undaunted," steamer	470	900	5	54	27,829	.....	Out of commission; no fixed crew.
"Celerity," ditto	439	150	2	.....	6,140	.....
<i>River-going vessels.</i>							
"Coleroon," pilot-vessel	387 ⁶ / ₁₆	.....	8	35	16,175	.....	} Pilot-vessels at the cruising stations. Up to September 1877 only.
"Cassandra," ditto	294 ⁶ / ₁₆	.....	8	35	16,123	.....
"Chinsurah," ditto	252 ⁶ / ₁₆	.....	8	33	15,804	.....
"Star," floating light-vessel	290	.....	8	27	16,700	.....	} On light duty.
"Comet," ditto	252 ⁶ / ₁₆	.....	8	26	12,610	.....
"Planet," ditto	241	.....	8	26	11,681	.....
"Meteor," ditto	260	.....	8	26	12,268	.....	} River service. Up to August 1877.
"Hermes," ditto	232 ⁶ / ₁₆	.....	8	26	13,268	.....
"Gaulis," ditto	254 ⁶ / ₁₆	.....	8	26	9,568	.....
"Dolphin," buoy-vessel	124 ⁶ / ₁₆	.....	3	31	3,634	.....	} River service. Up to August 1877.
"Kedgah," surveying vessel	124 ⁶ / ₁₆	.....	3	31	16,161	.....
"Marie," assistant river-going vessel	107 ⁶ / ₁₆	.....	3	32	10,353	.....
"Survey tender," ditto	300	.....	4	41	6,240	.....	} River service.
"No. 10 steamer	1,912	612	2	16	14,062	.....
"Vulcan," anchor-vessel	185	100	1	14	1,008	.....
Reserve vessel	130	.....	1	24	5,103	.....	} River service.
State yachts and boats	.....	.....	.....	3	1,277	.....
Boats Nos. 6, 10, 7, and 11, 5 daks boat and boat leads-	.....	.....	.....	35	4,576	.....
men	.....	.....	.....	111	6,278	.....
Buoys and passways	.....	.....	.....	27	2,066	.....

* Cost of establishment and contingents

D.—MARINE 2.

Statement showing number of Officers and men employed otherwise than in Government vessels, under the Government of Bengal during the year 1877-78.

DESCRIPTION OF ESTABLISHMENT.	Number of officers.	Number of men.	Total annual cost.*	Total annual earnings.
<i>Superintending Establishment—</i>			Rs.	Rs.
Port Officer and establishment	3	51	64,386†	
<i>Pilot Establishment—</i>				
Government, salaried	5	.....	44,163	10,66,858
Ditto, free	37	.....	3,69,750	
Licensed	25	.....	1,79,682	
Ditto leadsmen	5	.....	12,842	9,300
Leadsmen apprentice	10	.....	4,135	
<i>Any other Establishment—</i>				
Marine Court	2	.....	3,430	
Saugor light-house	2	50	6,015	
Cowcolly ditto	1	4	1,215	
Tidal semaphores ... ..	.....	28	2,766	
Seventh crew ... ..	.....	29	6,970	
Examiners of masters, mates, and engineers	9	.....	1,216	

* Cost of establishment and contingencies only.

† Including Agent for Transports and Government Consignments.

II.—TRADE.

I.—*Quantities and Value of the Principal and Other Articles of Merchandise, and Value of Treasure, imported from Foreign Countries during the official years 1876-77 and 1877-78.*

H.—

I.—Quantities and Value of the Principal and Other Articles of Merchandise,
of Bengal during the official

ARTICLES.	UNITED KINGDOM.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
Agricultural implements Val.	.....	2,46,661	.....	3,35,932
Animals, living No.	902	9,038	23	1,820
Apparel (including haberdashery, millinery, &c., but excluding hosiery) Val.	.....	16,26,885	.....	18,06,956
Arms, ammunition, &c. (excluding military accou- trements) ... .. "	.....	2,39,650	.....	2,31,637
Books and printed matter (including maps and charts) Cwt.	2,333	4,99,032	2,450	4,67,920
Building and engineering materials—				
Cement "	51,144	1,22,560	105,101	2,13,124
Other sorts Val.	.....	1,46,273	.....	1,29,829
Candles of all sorts lb	1,031,768	4,01,405	1,010,712	4,02,380
Clocks and watches No.	5,299	1,14,076	10,498	1,93,513
Coal—				
Coal Tons.	71,580	13,30,178	61,943	10,86,192
Coke "	1,750	40,160	3,598	79,072
Corals, real lb	.....	.....	.....	.....
Corks Cwt.	780	76,264	423	68,819
Cotton—				
Raw ... .. "	.....	.....	.....	.....
Twist and yarn lb	12,312,419	1,03,25,682	14,730,878	1,14,52,397
Manufactures—				
Piece-goods—				
Grey Yds.	542,088,227	6,35,66,078	709,031,027	8,24,97,501
White "	113,571,853	1,59,16,661	135,422,271	1,75,61,286
Coloured, printed, or dyed "	76,845,523	1,25,48,338	83,761,471	1,20,54,116
Other sorts { No.	63,013	2,69,202	880,163	8,51,526
Thread, sewing lb	1,482,195	2,63,140	3,118,029	3,91,577
Other sorts of manufactures { Yds.	67,169	4,49,571	119,080	3,65,186
Drugs and medicines Val.	498,690	7,82,555	19,414	10,57,573
Dyeing and colouring materials Cwt.	83	88,152	327	1,24,073
Earthenware and porcelain Val.	.....	2,25,569	.....	2,72,515
Flax—				
Manufactures—				
Piece-goods Yds.	278,890	1,07,420	561,490	1,69,767
Canvas "	519,210	2,52,521	678,235	3,10,184
Other sorts lb	36,397	81,347	330,062	1,11,146
Fruits and vegetables Val.	.....	5,095	.....	6,550
Glass and glassware—				
Beads and false pearls Cwt.	221	13,516	587	28,951
Other ware Val.	.....	8,76,450	.....	8,00,710
Gums and resins Cwt.	160	845	2,660	12,774
Hardware and cutlery Val.	.....	19,18,351	.....	20,52,077
Instrument and apparatus of all kinds ... .. "	.....	1,81,977	.....	2,41,073
Ivory—				
Unmanufactured and manufactured ... .. "	.....	.....	.....	180
Jewellery, &c. ... .. "	.....	1,93,389	.....	1,28,063
Leather, and manufactures of ... .. "	.....	2,81,780	.....	3,57,581
Liquors—				
Ale, beer, and porter Gals.	546,708	12,78,487	636,784	15,58,620
Spirits "	224,826	21,09,341	282,878	28,99,097
Wines and liqueurs "	165,627	16,05,840	184,207	19,10,666
Other sorts "	4,174	12,244	4,746	18,116
Machinery and millwork Val.	.....	29,45,064	.....	30,52,747
Matches, Lucifer and other ... .. "	.....	2,04,666	.....	2,32,283
Metals—				
Copper—				
Unwrought Cwt.	33,213	17,12,469	42,610	20,10,784
Wrought "	69,934	34,81,293	73,108	34,55,107
Other sorts ... .. "	.....	.....	.....	.....

I.—Quantities and Value of the Principal and Other Articles of Merchandise,
of Bengal during the official

ARTICLES.	ITALY.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
Agricultural implements Val.	.....	.....	.....	.....
Animals, living No.	.....	.....	.....	.....
Apparel (including haberdashery, millinery, &c., but excluding hosiery) Val.	.....	22,483	.....	29,694
Arms, ammunition, &c. (excluding military accou- trements) ... .. " "	.....	130	.....	.....
Books and printed matter (including maps and charts) Cwt.	1	100	2	216
Building and engineering materials—				
Cement " "	23	25	101	161
Other sorts Val.	.....	.....	.....	.....
Candles of all sorts lb	.....	.....	1,776	472
Clocks and watches No.	7	110	.....	.....
Coal—				
Coal Tons.	.....	.....	.....	.....
Coke ... .. " "	.....	.....	.....	.....
Corals, real lb	29,570	5,25,979	29,389	4,72,275
Corks Cwt.	1	710	8	1,632
Cotton—				
Raw ... .. " "	.....	.....	.....	.....
Twist and yarn lb	129,100	1,68,864	259,090	2,97,841
Manufactures—				
Piece-goods—				
Grey Yds.	.....	.....	612,102	68,636
White " "	51,952	19,225	125,102	11,255
Coloured, printed, or dyed " "	176,184	41,391	35,509	5,808
Other sorts { No.	.....	.....	7,881	5,722
Thread, sewing lb	.....	.....	60	.....
Other sorts of manufactures { Yds.	3,118	5,693	.....	11,631
Drugs and medicines Val.	.....	161	.....	161
Dyeing and colouring materials Cwt.	18	9,823	4	9,858
Earthenware and porcelain Val.	.....	219	.....	299
Flax—				
Manufactures—				
Piece-goods Yds.	.....	.....	.....	.....
Canvas ... .. " "	.....	.....	.....	.....
Other sorts lb	.....	.....	.....	.....
Fruits and vegetables Val.	.....	31	.....	37
Glass and glassware—				
Beads and false pearls Cwt.	6,784	2,58,751	6,318	2,55,569
Other ware Val.	.....	848	.....	.....
Gums and resins Cwt.	.....	.....	.....	.....
Hardware and cutlery Val.	.....	1,119	.....	3,110
Instruments and apparatus of all kinds ... .. " "	.....	288	.....	1,076
Ivory—				
Unmanufactured and manufactured ... .. " "	.....	85	.....	14
Jewellery, &c. ... .. " "	.....	634	.....	353
Leather, and manufactures of ... .. " "	.....	.....	.....	.....
Liquors—				
Ale, beer, and porter Gals.	.....	.....	.....	16,102
Spirits " "	1,942	22,154	1,131	10,896
Wines and liqueurs " "	1,348	8,081	1,799	7
Other sorts ... .. " "	.....	.....	.....	352
Machinery and millwork Val.	.....	15,097	.....	5
Matches, Lucifer and other ... .. " "	.....	2	.....	.....
Metals—				
Copper—				
Unwrought Cwt.	.....	.....	726	1,52,468
Wrought ... .. " "	.....	.....	.....	.....
Other sorts ... .. " "	.....	.....	.....	.....

H.—

I.—Quantities and Value of the Principal and Other Articles of Merchandise,
Bengal during the official years

ARTICLES.	UNITED STATES.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
Agricultural implements Val.	.....	.....	.....	60
Animals, living No.	.....	.....	.....	.....
Apparel (including haberdashery, millinery, &c., but excluding hosiery) Val.	.....	321	.....	42 ²
Arms, ammunition, &c. (excluding military accou- trement) ... .. "	.....	.....	.....	.....
Books and printed matter (including maps and charts) Cwt.	1	270	2	221
Building and engineering materials—				
Cement Val.	.....	770	.....	100
Other sorts lb	.....	.....	.....	.....
Candles of all sorts No.	342	2,700	672	4,512
Clocks and watches Tons.	.....	.....	.....	.....
Coal—				
Coal Tons.	1,287	20,288	.....	.....
Coke ... .. "	.....	.....	.....	.....
Cork, real lb	.....	.....	.....	.....
Corks Cwt.	.....	.....	.....	.....
Cotton—				
Raw ... .. "	.....	.....	.....	.....
Twist and yarn lb	.....	.....	.....	.....
Manufactures—				
Piece-goods—				
Grey Yds.	407,480	92,620	518,780	95,181
White "	13,233	3,096	2,152	751
Coloured, printed, or dyed ... .. "	.....	.....	778,200	1,44,207
Other sorts { No.	.....	.....	600	40
Thread, sewing lb	.....	.....	.....	.....
Other sorts of manufacture { Yds.	.....	.....	2,028	1,792
Drugs and medicines Val.	.....	5,605	.....	15,120
Dyeing and colouring materials Cwt.	.....	.....	.....	.....
Earthenware and porcelain Val.	.....	3	.....	2
Flax—				
Manufactures—				
Piece-goods Yds.	.....	.....	.....	.....
Canvas lb	.....	.....	120	66
Other sorts ... .. "	.....	.....	.....	.....
Fruits and vegetables Val.	.....	4,000	.....	.....
Glass and glassware—				
Beads and false pearls Cwt.	.....	.....	.....	.....
Other ware Val.	.....	.....	.....	7,048
Gums and resins Cwt.	632	3,400	8,638	36,370
Hardware and cutlery Val.	.....	8	.....	710
Instruments and apparatus of all kinds ... .. "	.....	.....	.....	3,700
Ivory—				
Unmanufactured and manufactured ... .. "	.....	.....	.....	.....
Jewellery, &c. ... .. "	.....	.....	.....	.....
Leather, and manufactures of ... .. "	.....	31	.....	.....
Liquors—				
Ale, beer, and porter Gals.	.....	.....	1,264	5,133
Spirits ... .. "	.....	.....	.....	.....
Wines and liqueurs "	21	312	2	18
Other sorts ... .. "	.....	.....	.....	.....
Machinery and millwork Val.	.....	40	.....	3,622
Matches, Lucifer and other ... .. "	.....	.....	.....	.....
Metals—				
Copper—				
Unwrought Cwt.	.....	.....	.....	.....
Wrought ... .. "	.....	.....	.....	.....
Other sorts ... .. "	.....	.....	.....	.....

TRADE—continued.

and Value of Treasure, imported from Foreign Countries into Presidency of
1876-77 and 1877-78—continued.

ARABIA.				CEYLON.			
1876-77.		1877-78.		1876-77.		1877-78.	
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
7	450	18	185				
	5				439		486
					5		
					50	1	153
			150		11,518		5,230
1	100				85		
					465	679	9,170
						12	2,280
						10	13
				151,379	20,764	111,450	16,575
				1,918	133	28,120	3,257
				4,567	1,258		
						318	125
						8	16
	2,077	1,901		8	12		3,620
	5			490	2,450	1	5
					138		25
						8	8
1,120	500						
	2,38,463		2,17,528		61,7623		74,846
						1	1,575
14	1,205	2	124		701		87
	1,102		77		205		56
	50				50		
							29,334
					927		12
					140		
				60	149		94
				14	156	7	3,162
				102	1,695	422	
	65		5				538
				6	321		18
98	8,723	4	150			146	7,290

H.—

I.—Quantities and Value of the Principal and Other Articles of Merchandise,
of Bengal during the official years

ARTICLES.	CHINA.			
	1870-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
Agricultural implements Val.	.....	713	.....	201
Animals, living No.	.....	.....	.....	.....
Apparel (including haberdashery, millinery, &c., but excluding hosiery) Val.	.....	21,910	.....	16,555
Arms, ammunition, &c. (excluding military ac- countrements) ... .. "	.....	55	.....	100
Books and printed matter (including maps and charts) Cwt.	9	2,293	5	611
Building and engineering materials—				
Cement Val.	.....	1,830	78	2,070
Other sorts lb	.....	.....	.....	501
Candles of all sorts No.	6	45	.....	.....
Clocks and watches Cwt.	4	780	.....	.....
Coal—				
Coal Tons	.....	.....	.....	.....
Coke lb	.....	.....	112	5
Corns, real Cwt.	.....	.....	.....	.....
Corks Cwt.	.....	.....	.....	.....
Cotton—				
Raw lb	.....	.....	.....	.....
Twist and yarn lb	.....	.....	.....	.....
Manufactures—				
Piece-goods—				
Grey Yds.	.....	.....	.....	.....
White " 219	.....	175	.....	.....
Coloured, printed, or dyed 1,505	.....	1,221	3,176	2,787
Other sorts { No. }	.....	.....	.....	.....
Thread, sewing lb	.....	.....	.....	.....
Other sorts of manufactures { Yds. }	.....	.....	15	15
Drugs and medicines Val.	.....	2,16,582	.....	3,16,897
Dyeing and colouring materials Cwt.	2,383	12,076	4,231	26,178
Earthenware and porcelain Val.	.....	36,134	.....	58,160
Flax—				
Manufactures—				
Piece-goods Yds.	76	56	38	33
Canvas lb	.....	.....	.....	.....
Other sorts Val.	.....	24	.....	104
Fruits and vegetables Cwt.	89	2,991	128	4,554
Glass and glassware—				
Beads and false pearls Val.	.....	92,763	.....	1,22,270
Other ware Cwt.	.....	.....	1	10
Gums and resins Val.	.....	1,057	.....	696
Hardware and cutlery Cwt.	.....	395	.....	390
Instruments and apparatus of all kinds ... .. "	.....	.....	.....	.....
Ivory—				
Unmanufactured and manufactured ... .. "	.....	863	.....	196
Jewellery, &c. ... .. "	.....	13,904	.....	9,454
Leather, and manufactures of ... .. "	.....	2,835	.....	94
Liquors—				
Ale, beer, and porter Gals.	21	64	.....	.....
Spirits "	861	5,183	1,897	13,826
Wines and liqueurs "	87	874	217	2,453
Other sorts ... .. "	.....	.....	.....	.....
Machinery and millwork Val.	.....	2,950	.....	405
Matches, Lucifer and other ... .. "	.....	932	.....	115
Metals—				
Copper—				
Unwrought Cwt.	13,714	6,95,719	20,641	9,56,274
Wrought "	1,775	57,498	369	13,053
Other sorts "	185	8,815	.....	.....

TRADE—continued.

and Value of Treasure, imported from Foreign Countries into the Presidency
1876-77 and 1877-78—continued.

PERSIA.				STRAITS SETTLEMENTS.			
1876-77.		1877-78.		1876-77.		1877-78.	
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
.....
.....
.....	3,367	.....	3,367
.....	203	.....	240
.....	2	775	3	710
.....	1,888	21	855
.....	629
.....
.....	21	210
.....	56	40	4
.....	4	727	.....	886
.....
.....	120	180	.....	.....
.....
.....	2,240	385	11,504	1,790
.....	3,949	370	3,805	1,274
.....	160	70	10,114	2,221	4,771	1,518
.....	160	90	2,155	298
.....
.....	20	.....	.....
.....	64,707	.....	67,106
.....	9,631	49,184	5,739	28,225
.....	3,543	.....	626
.....
.....	861	547	.....	.....
.....
.....	1,000,119	.....	91,569
.....	658	.....	.....	.....	.....	.....
.....	1	950	.....	.....
.....	1,429	.....	1,223
.....	12,550	1,61,851	16,173	2,22,065
.....	719	.....	2,336
.....	457	.....	543
.....	614	.....	200
.....	3,136	.....	11,576
.....	622	.....	503
.....
.....
45	270	.....	.....	165	1,870	1,192	8,630
.....	36	267	29	215	335	1,717
.....
.....	10	.....	.....
.....	2,565	.....	2,433
.....
.....	80	4,018	.....	.....
.....	1	50	17	815
.....	47	2,100	.....	.....

H.—

I.—Quantities and Value of the Principal and Other Articles of Merchandise,
of Bengal during the official years

ARTICLES.	AUSTRALIA.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
Agricultural implements Val.	.....	.....	.....	.....
Animals, living No.	1,317	3,30,350	1,619	4,93,670
Apparel (including haberdashery, millinery, &c., but excluding hosiery) Val.	.....	1,083	.....	375
Arms, ammunition, &c. (excluding military ac- countrements) ... .. "	.....	.....	.....	.....
Books and printed matter (including maps and charts) Cwt.	.....	3	.....	110
Building and engineering materials—				
Cement	.....	.....	.....	.....
Other sorts Val.	.....	28,798	.....	28,357
Candles of all sorts lb.	290	163	12	.....
Clocks and watches No.	14	420	.....	.....
Coal—				
Coal Tons.	598	6,270	9,990	1,07,450
Coke lb.	.....	.....	110	2,800
Corals, real lb.	.....	.....	.....	.....
Corks Cwt.	.....	.....	.....	.....
Cotton—				
Raw ... .. "	.....	.....	.....	.....
Twist and yarn lb.	.....	.....	.....	.....
Manufactures—				
Piece-goods—				
Grey Yds.	.....	.....	.....	.....
White ... .. "	.....	.....	.....	.....
Coloured, printed, or dyed ... .. "	.....	.....	.....	.....
Other sorts { Yds. }	.....	.....	.....	.....
Thread, sewing { No. }	.....	.....	.....	.....
Other sorts of manufactures { lb. }	.....	.....	.....	.....
Drugs and medicines Val.	.....	16	.....	4,547
Dyeing and colouring materials Cwt.	.....	.....	.....	.....
Earthenware and porcelain Val.	.....	9	.....	21
Flax—				
Manufactures—				
Piece-goods Yds.	.....	.....	.....	.....
Canvas ... .. "	.....	.....	114	45
Other sorts lb.	.....	.....	.....	.....
Fruits and vegetables Val.	.....	350	.....	2,647
Glass and glassware—				
Beads and false pearls Cwt.	.....	.....	.....	.....
Other ware Val.	.....	.....	.....	3
Gums and resins Cwt.	.....	.....	.....	.....
Hardware and cutlery Val.	.....	15,746	.....	13,857
Instruments and apparatus of all kinds ... .. "	.....	350	.....	350
Ivory—				
Unmanufactured and manufactured ... .. "	.....	.....	.....	.....
Jewellery, &c. ... .. "	.....	4,625	.....	7,531
Leather and manufactures ... .. "	.....	7,403	.....	4,105
Liquors—				
Ale, beer, and porter Gals.	14	38	143	403
Spirits ... .. "	.....	.....	29	264
Wines and liqueurs "	1,445	7,431	236	1,096
Other sorts ... .. "	.....	.....	.....	.....
Machinery and millwork Val.	.....	103	.....	720
Matches, Lucifer and other	.....	.....	.....	.....
Metals—				
Copper—				
Unwrought Cwt.	28,104	17,12,696	36,692	18,36,098
Wrought "	46	1,770	90	3,613
Other sorts ... .. "	.....	.....	.....	.....

TRADE—continued.

and Value of Treasure, imported from Foreign Countries. into the Presidency
1876-77 and 1877-78—continued.

OTHER COUNTRIES.				TOTAL.			
1876-77.		1877-78.		1876-77.		1877-78.	
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
..... 1	..... 30	.....	.....	..... 2,227	2,47,374 3,39,868	..... 1,600	3,36,197 4,83,135
.....	11,615	.....	3,627	.....	17,72,353	.....	19,44,575
.....	.....	.....	.....	.....	2,40,255	.....	2,82,009
.....	1,063	.....	674	..... 2,601	5,06,288	..... 2,484	4,72,415
.....	21,866	.....	4,831	..... 51,523	1,23,385	..... 105,301	2,16,212
..... 12	..... 4	.....	.....	..... 2,60,811	2,60,811	.....	1,85,104
..... 9	180	.....	.....	..... 1,052,879	4,01,778	..... 1,013,280	4,03,151
.....	.....	.....	.....	..... 6,197	1,25,295	.....	2,07,805
..... 1,253	18,207	..... 357	7,020	..... 75,578	13,90,588	..... 77,010	12,25,718
..... 7	210	.....	.....	..... 1,757	40,370	..... 3,608	81,336
..... 2,546	48,150	..... 5,156	5,862	..... 32,906	6,00,048	..... 36,160	4,91,656
..... 10	2,525	.....	6	..... 907	1,05,792	..... 537	85,304
.....	18,000	.....	4,800	..... 12,516,839	1,05,55,852	..... 14,982,137	1,17,65,068
.....	.....	..... 360	80	..... 512,640,326	6,36,79,847	..... 710,288,772	8,26,70,716
..... 2,000	600	..... 6,190	2,157	..... 113,905,228	1,60,08,725	..... 135,700,147	1,76,90,624
.....	.....	..... 1,508	1,179	..... 77,265,302	1,26,47,979	..... 84,416,791	1,22,34,202
.....	.....	.....	.....	..... 63,043	2,69,292	..... 925,388	8,00,603
.....	.....	.....	.....	..... 1,182,655	2,53,140	..... 3,156,934	3,01,377
..... 6	1,262	.....	.....	..... 225,016	4,57,922	..... 353,912	3,78,633
..... 170	.....	.....	.....	..... 67,183	10,31,953	..... 119,112	14,85,360
.....	3,250	.....	7,152	..... 503,636	1,67,589	..... 21,112	1,94,137
.....	68	.....	.....	..... 12,606	2,66,907	..... 9,908	3,13,903
.....	492	.....	620	.....	.....	.....	.....
.....	.....	.....	.....	..... 279,927	1,07,993	..... 501,536	1,69,748
.....	.....	.....	.....	..... 519,210	2,52,521	..... 678,009	3,10,507
.....	.....	.....	.....	..... 39,703	31,953	..... 330,062	1,11,446
.....	1,46,807	.....	1,31,691	.....	5,56,700	.....	5,25,610
.....
..... 543	20,343	..... 245	11,269	..... 3,36,700	7,317	.....	3,37,567
.....	12,933	.....	404	..... 9,86,764	.....	.....	9,95,162
..... 20	230	.....	.....	..... 1,68,132	27,474	.....	2,71,347
.....	2,632	.....	486	..... 13,326	19,46,101	.....	20,65,019
.....	1,666	.....	.....	.....	1,89,183	.....	2,58,432
.....
.....	4,016	.....	5,427	..... 1,477	.....	.....	576
.....	42	.....	93	..... 2,30,344	.....	.....	1,99,676
.....	.....	.....	.....	..... 2,94,977	.....	.....	3,61,113
.....
..... 808	2,136	..... 376	1,120	..... 547,647	12,80,995	..... 678,629	15,64,866
..... 245	1,907	..... 223	2,393	..... 230,455	23,61,035	..... 302,769	30,21,241
..... 10,769	83,414	..... 7,905	58,241	..... 206,393	19,53,293	..... 210,740	21,47,141
.....	.....	.....	.....	..... 4,174	12,244	..... 4,761	18,195
.....	.....	.....	.....	.....	29,77,056	.....	30,64,226
.....	.....	.....	.....	.....	2,08,165	.....	2,34,876
.....
..... 375	15,581	..... 702	39,093	..... 75,117	41,25,235	..... 99,052	48,03,178
..... 160	7,249	.....	.....	..... 72,537	35,75,147	..... 75,170	36,72,097
.....	.....	.....	.....	..... 551	25,290	.....	.....

1.—Quantities and Value of the Principal and Other Articles of Merchandise of Bengal during the office

ARTICLES.	UNITED KINGDOM.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
Metals—<i>contd.</i>				
Iron—				
Wrought Cwt.	890,331	62,27,270	952,614	58,67,528
Other sorts "	35,966	91,672	69,419	1,62,258
Lead "	33,951	6,24,731	89,739	7,86,237
Steel "	24,384	2,57,252	22,811	2,25,990
Tin—				
Unwrought "	268	12,960	400	18,286
Other sorts "	5	380	54	941
Zinc or spelter "	71,966	10,60,954	92,360	12,79,857
All other sorts unenumerated "	2,783	3 19,712	3,612	2,16,791
Ons Gals.	60,311	88,619	134,130	1,54,886
Paints, colours, and painters' materials Val.	.....	5,31,292	.....	7,33,841
Paper and pasteboard ... .. "	.....	12,34,239	.....	15,58,168
Provisions ... .. "	.....	1,34,067	.....	14,07,429
Railway plant and rolling-stock ... .. "	.....	33,76,286	.....	21,58,110
Salt Tons.	232,715	32,69,788	199,947	29,51,123
Shells and cowries Val.	.....	.....	.....	.....
Silk—				
Raw lb	.....	.....	.....	.....
Manufactures—				
Piece-goods Yds.	212,883	3,39,110	263,756	3,27,115
Other sorts Val.	.....	22,632	.....	59,825
Spices lb	112	25	.....	.....
Sugar and sugarcandy, &c. Cwt.	44	661	26	407
Ten lb	1,185	1,083	473	468
Tobacco—				
Unmanufactured ... .. "	.....	.....	.....	.....
Manufactured "	331,949	2,69,437	289,256	1,94,461
Toys and requisites for games Val.	.....	2,17,380	.....	2,53,121
Umbrellas No.	867,406	-7,73,024	1,461,637	12,54,944
Wood, timber, and manufactures thereof (including firewood) Val.	.....	90,010	.....	46,994
Wool—				
Raw lb	.....	.....	5	10
Manufactures of—				
Piece-goods Yds.	3,748,548	32,49,134	4,269,328	33,18,128
Other sorts Val.	.....	12,64,423	.....	13,61,941
All other articles unenumerated ... .. "	.....	21,84,574	.....	21,55,479
Merchandise—				
Free ... .. "	.....	86,69,983	.....	85,11,154
Dutiable ... .. "	.....	14,45,35,736	.....	16,89,65,673
Total ... ..	.....	15,32,05,719	.....	17,74,74,827
Treasure—				
Gold ... .. "	.....	5,16,480	.....	3,68,099
Silver ... .. "	.....	1,86,90,195	.....	3,30,29,913
Total ... ..	.....	1,91,10,675	.....	3,33,88,913
Grand Total of Imports of Merchandise and Treasure ... ..	.....	17,23,16,394	.....	21,08,63,779
Government—				
Stores ... .. "	.....	83,85,662	.....	44,68,880
Treasure—				
Gold ... .. "	.....	.....	.....	.....
Silver ... .. "	.....	.....	.....	.....
Total of Treasure ... ..	.....	.....	.....	.....
Total of Stores and Treasure ... ..	.....	83,85,662	.....	44,68,880

H.-

I.—Quantities and Value of the Principal and Other Articles of Merchandise of Bengal during the official year.

ARTICLES.	ITALY.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
Metals—contd.				
Iron—				
Wrought Cwt.	20	160	.....	.....
Other sorts ... .. "	.....	.....	.....	.....
Lead ... .. "	.....	.....	.....	.....
Steel ... .. "	.....	.....	.....	.....
Tin—				
Unwrought ... .. "	.....	.....	.....	.....
Other sorts ... .. "	.....	.....	.....	.....
Zinc or spelter ... .. "	.....	.....	.....	.....
All other sorts unenumerated "	602	1,31,812	181	24,638
Oils Gals.	1	20	.....	2,906
Paints, colours, and painters' materials Val.	.....	8,000	.....	16,258
Paper and pasteboard ... .. "	.....	2,288	.....	1,485
Provisions ... .. "	.....	.....	.....	.....
Railway plant and rolling-stock ... .. "	.....	.....	.....	.....
Salt Tons	10,529	1,50,827	4,594	53,785
Shells and cowries Val.	.....	.....	.....	.....
Silk—				
Raw lb	.....	.....	.....	.....
Manufactures—				
Piece-goods Yds.	3,989	14,701	27,525	61,306
Other sorts Val.	.....	476	.....	2,164
Spices lb	.....	.....	.....	.....
Sugar and sugarcandy, &c. Cwt.	.....	.....	.....	.....
Tea lb	.....	.....	.....	.....
Tobacco—				
Unmanufactured ... .. "	.....	.....	.....	.....
Manufactured "	4	22	150	180
Toys and requisites for games Val.	.....	6,817	.....	3,440
Umbrellas No.	14	42	759	2,455
Wood—				
Timber and manufactures thereof (including fire-wood) Val.	.....	.....	.....	.....
Wool—				
Raw lb	.....	.....	.....	.....
Manufactures of—				
Piece-goods Yds.	.....	.....	.....	.....
Other sorts Val.	.....	7,040	.....	.....
All other articles unenumerated ... .. "	.....	56,277	.....	71,154
Merchandise—				
Free ... ..	.....	60,667	.....	82,657
Dutiable ... ..	.....	14,60,028	.....	15,48,602
Total ... ..	.....	14,60,695	.....	15,51,259
Treasure—				
Gold ... ..	.....	.....	.....	.....
Silver ... ..	.....	1,76,100	.....	3,50,000
Total ... ..	.....	1,76,100	.....	3,50,000
Grand Total of Imports of Merchandise and Treasure ... ..	.....	16,36,795	.....	19,81,259
Government—				
Stores ... ..	.....	.....	.....	.....
Treasure—				
Gold ... ..	.....	.....	.....	.....
Silver ... ..	.....	.....	.....	.....
Total of Treasure ... ..	.....	.....	.....	.....
Total of Stores and Treasure ... ..	.....	.....	.....	.....

H—

I.—Quantities and Value of the Principal and Other Articles of Merchandise
of Bengal during the official years

ARTICLES.	UNITED STATES.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
Metals—contd.				
Iron—				
Wrought Cwt.	.....	.....	.....	.....
Other sorts ... .. "	.....	.....	.....	.....
Lead ... .. "	.....	.....	.....	.....
Steel ... .. "	.....	.....	.....	.....
Tin—				
Unwrought ... .. "	.....	.....	.....	.....
Other sorts ... .. "	.....	.....	.....	.....
Zinc or spelter ... .. "	.....	.....	.....	.....
All other sorts, unenumerated ... .. "	.....	.....	.....	.....
Oils Gals.	188,768	1,79,171	9,85,957	8,30,168
Paints, colours, and painters' materials Val.	.....	.....	.....	50
Paper and pasteboard ... .. "	.....	30	.....	2,920
Provisions ... .. "	.....	4,307	.....	7,590
Railway plant and rolling-stock ... .. "	.....	.....	.....	.....
Salt Tons.	.....	.....	.....	.....
Shells and cowries Val.	.....	.....	.....	.....
Silk—				
Raw lb	.....	.....	.....	.....
Manufactures—				
Piece-goods Yds.	.....	.....	.....	.....
Other sorts Val.	.....	.....	.....	.....
Spices lb	.....	.....	.....	.....
Sugar and sugarcandy, &c. Cwt.	.....	.....	.....	3
Tea lb	.....	.....	40	40
Tobacco—				
Unmanufactured lb	.....	.....	.....	.....
Manufactured "	95,139	60,730	63,100	25,033
Toys and requisites for games Val.	.....	60	.....	.....
Umbrellas N.	.....	.....	.....	.....
Wood—				
Timber and manufactures thereof (including fire-wood). Val.	.....	81,980	.....	1,20,882
Wool—				
Raw lb	.....	.....	.....	.....
Manufactures of—				
Piece-goods Yds.	19,329	5,437	.....	.....
Other sorts Val.	.....	.....	.....	.....
All other articles, unenumerated ... .. "	.....	2,71,865	.....	84,392
Merchandise—				
Free ... .. "	.....	3,79,024	.....	2,74,187
Dutiable ... .. "	.....	3,58,018	.....	11,25,187
Total ... ..	.....	7,37,042	.....	13,99,374
Treasure—				
Gold ... .. "	.....	.....	.....	.....
Silver ... .. "	.....	.....	.....	.....
Total ... ..	.....	.....	.....	.....
Grand Total of Imports of Merchandise and Treasure ... ..	.....	7,37,042	.....	13,99,374
Government—				
Stores ... .. "	.....	.....	.....	.....
Treasure—				
Gold ... .. "	.....	.....	.....	.....
Silver ... .. "	.....	.....	.....	.....
Total of Treasure ... ..	.....	.....	.....	.....
Total of Stores and Treasure ... ..	.....	.....	.....	.....

*I.—Quantities and Value of the Principal and Other Articles of Merchandise,
of Bengal during the official years*

ARTICLES.	CHINA.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
Metals—contd.				
Iron—				
Wrought Cwt.	.....	.....	.....	.....
Other sorts ... .. "	.....	.....	.....	.....
Lead ... .. "	.....	.....	.....	.....
Steel ... .. "	.....	.....	.....	.....
Tin—				
Unwrought ... .. "	.....	.....	.....	.....
Other sorts ... .. "	.....	.....	.....	.....
Zinc or spelter ... .. "	.....	.....	.....	.....
All other sorts unenumerated "	284	4,630	.....	.....
Oils Gals.	2,160	2,00,007	1,136	1,32,857
Paints, colours, and painters' materials Val.	.....	2,61,973	16	37
Paper and pasteboards ... .. "	.....	46,236	.....	3,07,111
Provisions ... .. "	.....	24,921	.....	43,973
Railway plant and rolling-stock ... .. "	.....	.....	.....	74,389
Sail Tons.	.....	.....	.....	.....
Shells and cowries Val.	.....	12	.....	.....
Silk—				
Raw lb.	115,819	1,49,847	925,691	8,21,917
Manufactures—				
Piece-goods Yds.	15,465	15,965	28,846	25,819
Other sorts Val.	.....	7,949	.....	3,244
Spices lb.	7,042	1,320	1,776	166
Sugar and sugarcandy, &c. Cwt.	.....	263	69	1,541
Tea lb.	644,326	451,588	323,939	1,99,069
Tobacco—				
Unmanufactured "	4,331	955	1,663	464
Manufactured "	33,955	87,425	24,386	66,583
Toys Val.	.....	880	.....	1,114
Umbrellas No.	776	635	68	130
Wood, timber, and manufactures thereof (including firewood) Val.	.....	2,349	.....	1,659
Wool—				
Raw lb.	.....	.....	.....	.....
Manufactures of—				
Piece-goods Yds.	816	732	134	173
Other sorts Val.	.....	.....	.....	325
All other articles unenumerated ... .. "	.....	1,37,125	.....	1,84,128
Merchandise—				
Free ... .. "	.....	1,19,941	.....	95,503
Dutiable ... .. "	.....	21,59,130	.....	27,05,615
Total ...	.....	25,77,071	.....	28,91,258
Treasure—				
Gold ... .. "	.....	10,82,891	.....	33,85,125
Silver ... .. "	.....	42,67,861	.....	83,52,997
Total ...	.....	53,50,752	.....	1,17,37,732
Grand Total of Imports of Merchandise and Treasure ...	.....	79,27,823	.....	1,46,28,970
Government—				
Stores ... .. "	.....	2,112	.....	.....
Treasure—				
Gold ... .. "	.....	.....	.....	.....
Silver ... .. "	.....	.....	.....	.....
Total of Treasure ...	.....	.....	.....	.....
Total Stores and Treasure ...	.....	2,112	.....	.....

TRADE—continued.

and Value of Treasure, imported from Foreign Countries into the Presidency
1876-77 and 1877-78—continued.

PERSIA.				STRAITS SETTLEMENTS.			
1876-77.		1877-78.		1876-1877.		1877-78.	
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
.....	2,050	1,750	.....	.....
.....	15
.....	1	.....
.....	24,840	12,21,708	30,166	14,09,430
.....	144	2,507	253	2,573
.....	2,717	5,652	1	.....
.....	9,792	90,944	84,027
.....	42,094	.....	26,293
.....	49,748	.....	1,024
.....	30	.....	.....	.....	1,07,152
1,131	11,472	1,050	13,192	.....	.....	.....	48
.....	30	.....	15
.....	12,369	31,187	.....	.....
.....	640	539	1,985	2,462
.....	8	.....	.....
.....	10,542,866	15,86,985	11,244,237	20,02,696
.....	6	106	17	345
.....	47,251	32,272	52,248	38,505
.....
.....	53,049	1,12,721	47,124	1,35,633
.....	556	.....	536
.....	46	71	5	5
.....	23,043	.....	11,347
.....
.....
.....	612	272	.....	.....
.....	2,01,567	.....	100
.....	200	.....	45	.....	.....	.....	2,18,698
.....	1,79,093	.....	1,23,600
.....	15,032	.....	14,562	.....	35,38,733	.....	43,69,534
.....	15,032	.....	14,562	.....	37,37,826	.....	44,93,154
.....	1,760	.....	3,240
.....	1,05,868	.....	12,09,347
.....	1,07,623	.....	12,03,587
.....	15,032	.....	14,562	.....	38,15,154	.....	56,96,721
.....	29,514	.....	.....
.....
.....
.....	29,5	.....	.....

H.—

I.—Quantities and Value of the Principal and Other Articles of Merchandise, of Bengal during the official years

ARTICLES.	AUSTRALIA.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
Metals—concl'd.				
Iron—				
Wrought Cwt.	2,000	3,000	9	150
Other sorts "	38	89	46	70
Lead "	15	159		
Steel "				
Tin—				
Unwrought "				
Other sorts "				
Zinc or spelter "	240	2,700	212	2,544
All other sorts unenumerated "				
Oils Gals.			80	80
Paints, colours, and painters' materials Val.				41
Paper and pasteboard "				
Provisions "		24,969		21,185
Railway plant and rolling-stock "		50,190		198,910
Salt Ton				
Shells and cowries Val.				
Silk—				
Raw lb.				
Manufactures—				
Piece-goods Yds.				
Other sorts Val.				
Spices lb.				
Sugar, sugarcandy, &c. Cwt.	33	395		
Tea lb.	90	84	41	31
Tobacco—				
Unmanufactured "				
Manufactured "	15,580	9,738	20	15
Toys Val.		550		60
Umbrellas No.				
Wood timber, and manufactures thereof (including fire-wood) Val.		3,075		19,826
Wool—				
Raw lb.				
Manufactures of—				
Piece-goods Yds.				
Other sorts Val.				
All other articles unenumerated "		12,190		21,979
Merchandise—				
Free "		4,38,531		7,72,729
Dutiable "		17,87,354		18,90,532
Total		22,25,885		26,63,261
Treasure—				
Gold "		2,75,176		2,12,629
Silver "		2,132		6,41,000
Total		2,77,308		8,57,629
Grand Total of Imports of Merchandise and Treasure		25,03,193		35,20,890
Government—				
Stores "				50
Treasure—				
Gold "				
Silver "				
Total of Treasure				
Total of Stores and Treasure				50

TRADE—continued.

and Value of Treasure, imported from Foreign Countries into the Presidency
1876-77 and 1877-78—concluded.

OTHER COUNTRIES.				TOTAL.			
1876-77.		1877-78.		1876-77.		1877-78.	
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
493	2,865	.....	.....	896,076	62,40,383	952,974	58,69,669
762	1,174	207	416	36,980	95,170	60,680	1,62,764
.....	.....	.....	.....	33,909	6,24,890	39,760	7,86,252
.....	.....	100	900	24,384	2,67,252	22,911	2,26,890
.....	.....	1,794	71,966	25,108	12,34,668	32,660	14,99,682
.....	.....	.....	.....	5	380	55	941
.....	.....	.....	.....	72,574	10,70,791	92,825	12,84,974
286	34,235	.....	.....	5,787	7,15,974	4,930	4,03,700
313	876	101,966	71,621	255,937	2,89,782	1,384,079	12,70,520
.....	.....	.....	3	.....	8,24,344	.....	11,02,344
.....	1,980	.....	571	.....	13,40,670	.....	16,28,283
.....	5,906	.....	2,312	.....	12,91,111	.....	16,71,730
.....	.....	.....	.....	.....	34,26,776	.....	22,57,368
4,057	50,871	2,205	29,910	270,907	37,00,146	219,173	32,07,092
.....	15,943	.....	17,222	.....	25,983	.....	1,31,444
.....	.....	.....	.....	128,188	1,81,034	225,766	3,21,977
3,745	1,630	5,945	5,521	1,005,285	9,93,419	1,344,522	12,71,380
.....	.....	.....	.....	.....	36,446	.....	1,56,547
3,265	2,041	146,837	33,265	10,554,338	14,90,629	14,411,220	20,30,478
1	30	.....	110	.....	1,610	102	2,201
.....	.....	3,815	4,765	692,852	4,85,027	387,656	2,42,818
.....	.....	184	7	4,331	955	1,787	411
2,800	7,471	4,719	10,089	533,655	4,88,517	431,356	4,38,976
.....	3,654	.....	.....	.....	2,31,427	.....	2,30,317
.....	.....	11	44	868,778	7,75,384	1,462,510	12,96,78
.....	56,375	.....	340	.....	2,62,232	.....	2,00,120
.....	.....	.....	.....	.....	.....	.....	10
3,980	8,297	53	20	3,785,793	2,77,626	4,354,891	33,80,492
.....	.....	.....	126	.....	12,71,526	.....	13,62,615
.....	5,254	.....	30,619	.....	30,17,002	.....	28,81,633
.....	1,08,527	.....	17,342	.....	1,01,14,657	.....	1,00,49,766
.....	5,68,553	.....	5,52,197	.....	15,68,24,071	.....	18,38,94,990
.....	6,77,085	.....	5,69,539	.....	16,69,38,128	.....	19,38,54,456
.....	61,773	.....	3,94,683	.....	20,38,770	.....	41,26,195
.....	36,286	.....	2,29,700	.....	2,42,16,895	.....	4,51,87,797
.....	98,059	.....	6,24,383	.....	2,62,54,065	.....	4,96,13,992
.....	7,75,144	.....	11,93,922	.....	19,31,92,753	.....	24,34,68,448
.....	184	.....	10	.....	64,20,772	.....	44,70,790
.....
.....
.....
.....
.....	184	.....	10	.....	64,20,772	.....	44,70,790

II.—Quantities and Value of the Principal and Other Articles of Foreign exported to Foreign Countries from the Presidency of Bengal

ARTICLES.		UNITED KINGDOM.			
		1876-77.		1877-78.	
		Quantity.	Value.	Quantity.	Value.
FOREIGN MERCHANDISE.					
Cotton—					
Twist and yarn	lb	265	250	120	165
Manufactures—					
Piece-goods—					
Grey	Yds.	268	50	35,430	2,433
White	"	326	124	1,016	804
Coloured, printed, or dyed	"	50,559	9,773	16,074	1,833
Other sorts of piece-goods	{ No. lb	23	46	.....	.....
Other sorts of manufactures	{ Yds. lb	42	21	3,700	5,161
Gums and resins	Cwt.	30	815	.....	12
Ivory—					
Unmanufactured and manufactured	Val.	.....	80	.....	310
Metals—					
Iron	Cwt.	6,617	12,538	7,997	15,115
All others unenumerated	"	0-0-18	8	1	49
All other articles unenumerated	Val.	.....	5,20,205	.....	5,60,513
Total of Foreign Merchandise ... ..		.....	5,43,910	.....	5,86,185
INDIAN PRODUCE AND MANUFACTURES.					
Animals, living	No.	85	222	2	40
Apparel (including haberdashery, millinery, &c., but excluding hosiery)	Val.	.....	1,55,864	.....	1,51,864
Caoutchouc—					
Raw	Cwt.	8,211	5,08,317	9,472	5,09,719
Coffee ... ..	"	.....	.....	.....	.....
Coin—					
Unmanufactured and manufactured	Cwt.	5,661	45,120	917	8,527
Cotton—					
Raw	Cwt.	1,50,551	34,17,902	23,068	5,26,813
Twist and yarn	lb	.....	.....	.....	.....
Manufactures—					
Piece-goods	{ Yds. No.	16	25	150	245
Other sorts	Val.	.....	916	.....	1,230
Drugs and medicines ... ..	"	.....	559	.....	63,808
Dyeing and colouring materials—					
Indigo	Cwt.	40,833	1,38,19,784	44,030	1,33,94,619
Other sorts	"	92,356	8,12,676	177,707	9,77,636
Grain and pulse—					
Gram	Cwt.	760	3,492	113	456
Rice in the husk (paddy) ... ..	"	.....	.....	10	84
not in the husk	"	466,403	18,39,629	370,278	15,09,334
Wheat	"	3,303,920	1,03,64,085	4,118,792	1,72,68,028
Other sorts	"	14,046	44,565	14,320	56,344
Gums and resins—					
Cutch and gambier	Cwt.	4,245	49,229	5,486	56,816
Hemp—					
Raw	Cwt.	9,722	82,013	6,038	48,380
Manufactures of (excluding cordage)	Val.	.....	.....	.....	.....
Hides and skins—					
Hides, raw	{ Cwt. No.	234,466	84,03,965	259,352	92,28,207
" dressed or tanned	{ Cwt. No.	3,292,698	36,777	3,527,580	1,16,119
Skins, raw	{ Cwt. No.	12,297	759	24,198	71,665
" dressed or tanned	{ Cwt. No.	46,606	900	104,184	80,499
Jewellery and precious stones, &c.	Val.	92,313	1,02,000	82,706	89,594
Iron—					
Raw	Cwt.	3,576,816	2,21,12,126	4,493,415	3,03,04,686
Manufactures of—					
Gunny-bags	No.	1,874,893	3,92,564	496,496	1,26,591
Other kinds	{ Yds. Cwt.	1,397,192	1,74,106	151,740	25,807
		2,679		1,612	

II.—Quantities and Value of the Principal and Other Articles of Foreign
exported to Foreign Countries from the Presidency of Bengal

ARTICLES.	ITALY.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
FOREIGN MERCHANDISE.				
Cotton—				
Twist and yarn lb	.....	.....	.....	.....
Manufactures—				
Piece-goods—				
Grey Yds.	.....	.....	.....	.....
White ... .. "	.....	.....	.....	.....
Coloured, printed, or dyed ... .. "	.....	.....	.....	.....
Other sorts of piece-goods { No. }	.....	.....	.....	.....
Other sorts of manufactures { lb }	.....	.....	.....	.....
Gums and resins Cwt.	.....	.....	.....	.....
Ivory—				
Unmanufactured and manufactured Val.	.....	.....	.....	.....
Metals—				
Iron Cwt.	.....	.....	.....	.....
All others unenumerated Val.	.....	.....	.....	.....
All other articles unenumerated Val.	.....	3,572	.....	7,561
Total of Foreign Merchandise ...	.....	3,572	.....	7,561
INDIAN PRODUCE AND MANUFACTURES.				
Animals, living No.	.....	.....	.....	.....
Apparel (including haberdashery, millinery, &c., but excluding hosiery) Val.	.....	902	.....	1,750
Crouche—				
Raw Cwt.	.....	.....	.....	.....
Coffee ... .. "	.....	.....	1	60
Coir—				
Unmanufactured and manufactured ... .. "	.....	.....	.....	.....
Cotton—				
Raw lb	268	5,593	134	3,105
Twist and yarn lb	.....	.....	.....	.....
Manufactures—				
Piece-goods { Yds. }	.....	.....	.....	.....
Other sorts { No. }	.....	.....	.....	.....
Other sorts Val.	.....	.....	.....	.....
Drugs and medicines ... .. "	.....	.....	.....	.....
Dyeing and colouring materials—				
Indigo Cwt.	1,219	4,48,922	1,367	4,63,508
Other sorts "	2,270	21,555	4,124	23,961
Grain and pulse—				
Gram Cwt.	.....	.....	917	2,778
Rice in the husk "	7	30	44	270
" not in the husk ... .. "	.....	.....	.....	.....
Wheat "	4,950	16,972	21,412	95,518
Other sorts ... .. "	.....	.....	22	90
Gums and resins—				
Cutch and gambier Cwt.	273	2,738	3,518	35,391
Hemp—				
Raw Cwt.	.....	.....	.....	.....
Manufactures of (excluding cordage) Val.	.....	.....	.....	.....
Hides and skins—				
Hides, raw { Cwt. }	35,441	12,58,884	43,401	15,21,347
" dressed or tanned { No. }	500,913	.....	5,96,019	.....
" dressed or tanned { Cwt. }	.....	15	548	34,104
" dressed or tanned { No. }	3	.....	7,202	.....
Skins, raw { Cwt. }	829	33,394	941	43,067
" dressed or tanned { No. }	34,320	.....	54,248	.....
" dressed or tanned { Cwt. }	16	3,050	.....	.....
" dressed or tanned { No. }	1,700	.....	.....	.....
Jewellery and precious stones, &c. Val.	.....	1,830	.....	.....
Jute—				
Raw Cwt.	4,743	31,346	3,721	23,167
Manufactures of—				
Gunny-bags No.	20,500	4,944	33,750	2,020
Other kinds { Cwt. }	53,058	7,177	106,218	11,617
Other kinds { Yds. }	41	.....	.....	.....

TRADE—continued.

Merchandise and Indian Produce Manufactures, and Value of Treasure, during the official years 1876-77 and 1877-78—continued.

MAURITIUS.				SOUTH AMERICA.			
1876-77.		1877-78.		1876-77.		1877-78.	
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1,660	1,105	4,458	2,116	.....	.....	.....	.....
1,378,431	1,86,394	298,359	39,328	.....	.....	.....	.....
52,686	13,481	11,380	2,561	.....	.....	.....	.....
46,340	13,446	116,174	29,570	.....	.....	.....	.....
528	1,084	18,617	4,146	.....	.....	.....	.....
4,596	364	1,175	304	.....	.....	.....	.....
1,176	.....	.....	.....	.....	.....	.....	.....
606	6,591	886	5,645	.....	.....	.....	.....
.....
402	4,889	.....	1	.....	.....	.....	.....
28	1,283	3	160	.....	.....	.....	.....
.....	99,572	.....	1,20,862	.....	2,299	.....	2,305
.....	8,22,209	.....	2,04,693	.....	2,299	.....	2,305
.....
.....	31,883	.....	29,305	.....	700	.....	956
.....
56	2,380	60	2,425	.....	.....	.....	.....
714	10,491	689	6,859	.....	.....	.....	.....
52	909	74	1,768	.....	.....	.....	.....
7,416	2,652	224	70	.....	.....	.....	.....
2,501	.....	4,855	2,114	.....	.....	.....	.....
.....	1,218	.....	516	.....	900	.....	1,260
.....	188	.....	23,918	.....	.....	.....	.....
.....	33,438	.....	.....	.....	.....	.....	.....
1,384	16,801	3,608	38,822	421	3,443	270	2,150
150,859	3,86,994	243,244	8,37,034	.....	.....	.....	.....
1,114,436	57,68,859	1,497,794	66,41,338	4,11,916	16,00,885	290,894	11,32,193
4	9	.....	.....	.....	.....	.....	.....
92,615	3,25,635	126,780	5,45,880	.....	.....	.....	.....
195,018	5,35,681	222,238	7,59,803	11,216	38,770	6,156	27,629
.....	.....	15	180	.....	.....	.....	.....
.....	.....	155	1,110	.....	.....	.....	.....
.....	.....	.....	1,608	.....	.....	.....	.....
2	84	.....	.....	.....	.....	.....	.....
21	.....	.....	.....	.....	.....	.....	.....
30	196	.....	.....	.....	.....	.....	.....
46	.....	.....	.....	.....	.....	.....	.....
.....
.....
.....	340	.....	1,102	.....	.....	.....	.....
.....	.....	295	800	.....	.....	.....	.....
167,400	18,351	71,900	15,426	27,165	7,550	1,6,920	4,002
3,060	2,000	.....	624	.....	.....	.....	.....
131	.....	62	.....	.....	.....	.....	.....

H.-

II.—Quantities and Value of the Principal and Other Articles of Foreign, exported to Foreign Countries from the Presidency of Bengal

ARTICLES.	CHINA.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
FOREIGN MERCHANDISE.				
Cotton—				
Twist and yarn lb	24,000	12,000	71,000	30,019
Manufactures—				
Piece-goods—				
Grey Yds.	10,975	2,300	3,159	486
White "	1,212	354	782	291
Coloured, printed, or dyed "	4,092	1,008	.....	.....
Other sorts of piece-goods Yds.	.....	590	220	419
Other sorts of manufactures lb	.....	.....	.....	.....
Gums and resins Cwt.	0-0-4	2	.....	2
Ivory—				
Unmanufactured and manufactured Val.	.....	.....	.....	.....
Metals—				
Iron Cwt.	15	775	4	510
All others unenumerated Val.	.....	29,418	.....	40,317
All other articles unenumerated Val.	.....	.....	.....	40,317
Total of Foreign Merchandise ... ..	.....	46,451	.....	71,805
INDIAN PRODUCE AND MANUFACTURES.				
Animals, living No.	486	4,990	1,030	5,811
Apparel (including haberdashery, millinery, &c., but excluding hosiery) Val.	.....	7,358	.....	11,012
Caoutchouc—				
Raw Cwt.	.....	.....	.....	.....
Coffee ... .. "	.....	.....	.....	.....
Cuir—				
Unmanufactured and manufactured ... .. "	.....	5	.....	.....
Cotton—				
Raw lb	149,243	43,33,127	70,617	19,85,067
Twist and yarn lb	37,500	16,738	8,000	3,775
Manufactures—				
Piece-goods Yds.	1,990	2,062	25	61
Other sorts Val.	2,180	100	.....	.....
Drugs and medicines ... .. "	.....	87,760	.....	63,979
Dyeing and colouring materials—				
Indigo Cwt.	13½	55,985	.....	.....
Other sorts "	553	22,832	876	28,634
Grain and pulse—				
Grain "	1,932	5,213	1,566	5,125
Rice in the husk ... .. "	.....	.....	.....	.....
" not in the husk "	1,517	6,753	24,265	1,18,193
Wheat "	8	21	1	6
Other sorts "	307	766	229	845
Gums and resins—				
Cutch and gambier "	30	330	30	500
Hemp—				
Raw ... .. "	.....	.....	.....	.....
Manufactures of (excluding cordage) Val.	.....	.....	.....	.....
Hides and skins—				
Hides, raw Cwt.	24	940	.....	.....
" dressed or tanned Cwt.	468	.....	.....	.....
Skins, raw Cwt.	4	250	.....	.....
" dressed or tanned Cwt.	500	5,050	.....	.....
Other sorts No.	39	.....	.....	.....
Jewellery and precious stones, &c. Val.	4,500	500	.....	2,300
Jute—				
Raw Cwt.	22	132	28	180
Manufactures of—				
Gunny-bags No.	5,331,723	7,61,003	8,104,628	3,21,213
Other kinds Yds.	580,038	78,788	2,300	253

TRADE—continued.

Merchandise and Indian Produce and Manufactures, and Value of Treasure, during the official years 1876-77 and 1877-78—continued.

PERSIA.				STRAITS SETTLEMENTS.			
1876-77.		1877-78.		1876-77.		1877-78.	
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
.....	.....	.....	.....	220	215	1,200	600
.....	.....	.....	.....	43,480	6,477	33,544	9,197
828	215	1,030	226	143,974	27,159	86,396	20,837
384	90	816	204	30,223	9,980	9,139	4,064
.....	.....	{ ..... 36 }	6 { }	7,206	3,050	{ 8,094 }	2,191
.....	.....	.....	.....	{ ..... 344 }	1,205	{ 8 }	830
.....	.....	.....	.....	2	120	2	40
.....
.....	.....	120	120	7	133	284	2,580
.....	.....	.....	5	6	460	2	223
.....	8,333	.....	6,939	.....	2,903,87	.....	3,46,697
.....	3,044	.....	7,500	.....	3,23,186	.....	3,87,259
.....	.....	.....	.....	11,616	1,61,552	7,650	81,219
.....	183	.....	1,040	.....	71,401	.....	61,868
.....	.....	.....	.....	50	3,320	37	2,550
.....	.....	.....	.....	45	624	19	185
.....	.....	.....	.....	21,200	9,905	.....	.....
{ 500 }	950	{ 84 6 }	275	{ 22,678 126 }	17,779	{ 15,906 258 }	9,561
.....	.....	.....	.....	.....	2,000	.....	563
.....	.....	.....	.....	.....	18,761	.....	16,277
664	2,65,686	1,137	2,86,255	1045	9,474	693	18,507
.....	.....	.....	.....	20,104	55,804	23,305	82,515
.....	.....	.....	.....	.....	.....	22	59
38,067	1,36,280	37,781	1,45,716	59,008	2,04,080	43,253	2,02,025
.....	.....	.....	.....	41,014	1,14,039	27,511	1,18,872
.....	.....	.....	.....	8,533	28,833	9,200	34,034
.....
.....
.....
{ }	{ }	{ }	{ }	{ 3 43 }	43	{ ..... }	.....
.....	.....	.....	.....	.....	.....	1	75
.....	.....	.....	.....	.....	.....	14	.....
.....	.....	.....	.....	.....	.....	15	3-0
.....	.....	.....	.....	.....	.....	712	.....
.....	.....	.....	.....	30	805	25	2,265
.....	60	.....	.....	2,147	3,47,827	2,800	5,58,182
.....	.....	.....	.....	381	2,745	312	2,752
.....	.....	79,000	16,538	3,363,225	7,03,545	6,364,838	16,16,323
.....	.....	.....	.....	75,200	75,278	75,278	14,340
.....	.....	.....	.....	253	8,864	428	.....

H.—

II.—Quantities and value of the principal and other articles of foreign
exported to Foreign Countries from the Presidency of Bengal.

ARTICLES.	AUSTRALIA.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
FOREIGN MERCHANDISE.				
Cotton—				
Twist and yarn	lb	.....	.....	.....
Manufactures—				
Piece-goods—				
Grey	Yds.	.....	.....	.....
White ... ..	"	.....	.....	.....
Coloured, printed, or dyed ... ..	"	.....	.....	.....
Other sorts of piece-goods	{ No. }	144 } 432	.....	.....
Other sorts of manufactures	{ Yds. }	.....	.....	.....
Gums and resins	Cwt.	71	1,135	.....
Ivory—				
Unmanufactured and manufactured	Val.	.....	.....	.....
Metals—				
Iron	Cwt.	201	410	1,800
All other sorts unenumerated	Val.	.....	.....	4,025
All other articles, unenumerated	Val.	11,136	.....	33,988
Total of Foreign Merchandise		13,113	.....	38,013
INDIAN PRODUCE AND MANUFACTURES.				
Animals, living	No.	1	50	.....
Apparel (including haberdashery, millinery, &c., but excluding hosiery)	Val.	.....	6,536	7,118
Caoutchouc—				
Raw	Cwt.	.....	.....	.....
Coffee ... ..	"	.....	.....	.....
Coir—				
Unmanufactured and manufactured	"	173	2,265	218
Cotton—				
Raw ... ..	"	.....	.....	.....
Twist and yarn	lb	.....	.....	.....
Manufactures—				
Piece-goods	{ Yds. }	.....	.....	.....
Other sorts	{ No. }	.....	.....	.....
Drugs and medicines	Val.	.....	.....	.....
Dyeing and colouring materials—				
Indigo	Cwt.	.....	.....	.....
Other sorts ... ..	"	.....	40	311
Grain and pulse—				
Gram	"	7,377	20,788	3,611
Rice in the husk (paddy) ... ..	"	.....	.....	12,378
" not in the husk	"	64,665	3,71,098	55,446
Wheat	"	438	1,779	3,66,381
Other sorts	"	616	1,310	66,000
Gums and resins—				
Gutch and gambier	"	5	82	.....
Hemp—				
Raw	"	107	900	225
Manufactures of (excluding cordage)	Val.	.....	.....	1,812
Hides and skins—				
Hides, raw	{ Cwt. }	72 } 3,356	{ 53 }	2,712
" dressed or tanned	{ No. }	1,154 } { 912 }	.....	.....
Skins, raw	{ Cwt. }	6 } 365	{ 1 }	10
" dressed or tanned	{ No. }	500 } { 2,072 }	{ 2 }	35
Jewellery and precious stones, &c.	{ Cwt. }	22 } { 304 }	.....	88
Jute—				
Raw	Cwt.	13,344	80,693	20,092
Manufacture of—				
Gunny-bags	No.	6,984,210	20,01,571	8,580,122
Other kinds	{ Cwt. }	7,600 } 16,724	{ 62,164 }	29,81,802
	{ Yds. }	1,151 } { 2,166 }	.....	46,203

TRADE—continued.

Merchandise and Indian Produce and Manufactures, and Value of Treasure, during the official years 1876-77 and 1877-78—continued.

OTHER COUNTRIES.				TOTAL.			
1876-77.		1877-78.		1876-77.		1877-78.	
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1,892	1,264	1,051	806	29,737	17,134	79,182	35,619
28,131	4,513	19,629	2,907	1,461,785	1,91,037	413,736	58,571
2,262	1,159	1,890	576	279,010	60,713	262,430	54,858
3,994	1,449	24,250	4,180	185,932	35,942	177,799	42,006
.....	.....	24	36	672	5,182	20,991	6,819
736	229	.....	.....	1,179	1,819	1,210	6,529
25	424	96	1,481	736	9,117	4,725	11,133
.....	.....	.....	.....	736	84	727	460
107	1,139	187	1,608	13,579	34,804	15,034	33,692
51	2,567	61	2,896	126	7,842	74	4,783
.....	55,627	.....	51,595	.....	11,26,998	.....	12,66,144
.....	66,471	.....	66,175	.....	1,03,707	.....	15,21,008
.....	.....	17	348	13,823	1,40,801	8,701	91,201
.....	11,087	.....	15,239	.....	3,12,551	.....	3,05,639
.....	.....	.....	.....	9,393	5,91,161	11,331	7,35,828
.....	.....	.....	.....	56	2,380	64	2,379
672	7,151	235	2,250	6,865	65,656	2,108	20,349
2	30	.....	.....	311,125	80,08,861	95,598	25,52,627
112	70	350	194	66,228	29,455	9,087	3,773
36,626	30,415	32,714	20,745	69,448	55,853	70,495	39,454
.....	.....	.....	10	2,306	4,194	593	3,585
.....	790	609	.....	.....	1,53,467	.....	1,91,090
2,598	8,02,300	6,436	17,57,173	69,379	2,35,66,023	99,102	3,04,37,068
279	3,249	449	8,523	129,239	12,07,837	233,612	15,28,233
1,254	3,015	503	2,043	238,400	6,48,209	362,811	12,59,093
59	224	106	367	20,780	28,557	40,604	1,12,620
546,693	20,34,134	690,575	29,39,376	5,662,236	2,13,40,322	5,870,918	2,68,88,419
340,020	11,74,888	164,105	7,69,836	3,887,446	1,23,51,150	4,16,062	1,91,20,671
4,268	16,152	7,533	33,847	279,843	8,47,591	379,709	15,91,474
2	30	9	142	85,751	9,53,631	71,513	7,78,821
.....	.....	.....	.....	9,854	85,134	6,008	52,672
.....	.....	.....	.....	.....	.....	.....	1,608
191	5,785	793	18,681	368,763	1,21,07,416	472,532	1,48,37,158
3,151	.....	7,543	13	4,543,826	.....	5,315,192	2,300
.....	.....	1	.....	767	.....	31,623	1,51,618
.....	.....	.....	.....	12,346	.....	35,493	18,75,224
3	28	.....	.....	2,207,420	15,22,619	2,916,798	1,511
.....	.....	.....	25	6,17,111	.....	445,519	3,49,905
.....	1,009	1	2,450	778,560	5,61,933	.....	6,71,104
.....	.....	30,113	2,33,760	4,532,113	2,63,60,880	5,460,093	3,51,79,912
1,653,116	5,66,270	2,308,561	9,80,136	32,568,261	63,93,613	25,093,969	69,47,116
53,985	.....	19,600	3,895	6,008,559	7,27,576	2,964,469	4,12,099
12	.....	45	.....	4,119	.....	5,315	.....

H.—

II.—Quantities and Value of the Principal and Other Articles of Foreign
exported to Foreign Countries from the Presidency of Bengal.

ARTICLES.	UNITED KINGDOM.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
INDIAN PRODUCE AND MANUFACTURES.				
Lac—				
Dye Cwt.	14,367	2,92,816	7,292	2,34,041
Shell "	64,195	29,93,955	55,677	20,43,341
Other kinds "	18,717	7,29,348	13,460	4,15,291
Oils—				
Vegetable, not essential Gals.	7,59,092	7,97,431	532,879	7,50,937
Other sorts ... .. "	.....	.....	.....	.....
Opium Chests.	.....	.....	.....	.....
Provisions Cwt.	.....	69,317	.....	67,677
Gallicetro Cwt.	186,423	15,02,773	217,856	21,21,135
Seeds—				
Linseed "	2,718,094	1,43,47,677	4,383,233	2,49,47,813
Mustard and rapo... .. "	987,917	50,57,408	1,633,610	92,52,267
Poppy "	161,183	8,49,866	247,241	14,52,124
Teel or gingelly "	3,967	25,399	4,858	37,450
Other sorts "	337	2,209	428	3,440
Silk—				
Raw lb	495,064	14,06,520	677,444	18,59,455
Manufactures Val.	.....	9,36,515	.....	5,44,265
Spices lb	2,401,412	2,46,461	715,010	58,884
Sugar, sugarcandy, and other saccharine produce Cwt.	487,259	51,26,399	257,079	24,38,419
Tea lb	27,465,055	2,57,46,412	33,133,438	3,01,26,030
Tobacco—				
Unmanufactured "	4,522,078	2,53,513	6,324,129	3,26,588
Manufactured "	2,661	3,741	2,614	2,665
Wax (excluding carilles) Cwt.	298	35,488	315	28,469
Wood—				
Teak C. Tons.	.....	.....	1	35
Other sorts Val.	.....	8	.....	900
Wool—				
Raw lb	15,582	4,877	84,160	23,119
Manufactures of—				
Shawls No.	95	4,539	102	5,004
Other sorts lb	93,341	1,30,821	92,514	1,37,030
..... Yds.	4,169	5,991	.....	.....
All other articles unenumerated Val.	.....	8,90,049	.....	9,73,284
Indian produce and manufactures—				
Free ... .. "	.....	10,47,37,398	.....	13,51,95,054
Dutiable ... .. "	.....	1,93,71,816	.....	1,73,58,700
Total ... ..	.....	12,41,09,214	.....	15,25,53,754
Total of Merchandise, Foreign and Indian ... ..	.....	12,46,53,124	.....	15,31,40,239
Treasure—				
Gold ... .. "	.....	.....	.....	.....
Silver ... .. "	.....	6,000	.....	116
Total ... ..	.....	6,000	.....	116
Grand Total of Exports of Merchandise and Treasure ... ..	.....	12,46,59,124	.....	15,31,40,355
Government—				
Stores ... .. "	.....	6,703	.....	7,337
Treasure—				
Gold ... .. "	.....	.....	.....	.....
Silver ... .. "	.....	.....	.....	.....
Total of Treasure ... ..	.....	.....	.....	.....
Total of Stores and Treasure ... ..	.....	6,703	.....	7,337

TRADE—continued.

*Merchandise and Indian Produce and Manufactures, and Value of Treasure,
during the official years 1876-77 and 1877-78—continued.*

[illegible]

II.—

II.—Quantities and Value of the Principal and Other Articles of Foreign exported to Foreign Countries from the Presidency of Bengal

ARTICLES.	ITALY.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
INDIAN PRODUCE AND MANUFACTURES.				
Lac—				
Dye Cwt.	20	500	20	700
Shell "	2,712	1,00,147	1,921	66,537
Other kinds "	121	4,521	5	165
Oils—				
Vegetable, not essential... .. Gals.	55	69		
Other sorts "				
Opium { Chests }				
Provisions { Cwt. }		40		100
Salt petre Val.	18,503	1,27,884	10,708	1,04,085
Seeds—				
Linseed "	14	240	18,525	1,18,419
Mustard and rape "			14,044	92,603
Poppy "				
Teel or gingelly "	36,786	2,65,779	26,491	1,95,278
Other sorts "	37	165	2,001	12,281
Silk—				
Raw lb	257,552	21,58,360	265,415	21,88,026
Manufactures Val.		3,948		114
Spices lb	2,240	300	1,120	150
Sugar, sugarcandy, and other saccharine produce... Cwt.	38,894	1,06,413	19,468	2,17,148
Tea lb	465	385	221	221
Tobacco—				
Unmanufactured "	708,021	37,610	1,888,900	77,355
Manufactured "	1,009	311	23	35
Wax (excluding candles) Cwt.			2	191
Wood—				
Teak C. Tons				
Other sorts Val.				
Wool—				
Raw lb				
Manufactures of—				
Shawls No.	36	248		
Other sorts { lb }				
All other articles unenumerated { Yds. }				
Indian produce and manufactures—				
Free		44,29,376		48,78,475
Dutiable		5,53,620		5,20,480
Total		49,82,996		53,98,955
Total of Merchandise, Foreign and Indian		49,86,568		54,06,516
Treasure—				
Gold				
Silver				
Total				
Grand Total of Exports of Merchandise and Treasure		49,86,568		54,06,516
Government—				
Stores				
Treasure—				
Gold				
Silver				
Total of Treasure				
Total of Stores and Treasure				

TRADE—continued.

*Merchandise and Indian Produce and Manufactures, and Value of Treasure,
during the official years 1876-77 and 1877-78—continued.*

[illegible]

II.—

II.—Quantities and Value of the Principal and Other Articles of Foreign Exported to Foreign Countries from the Presidency of Bengal

ARTICLES.	UNITED STATES.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
INDIAN PRODUCE AND MANUFACTURES.				
Lac—				
Dye Cwt.	4,547	88,368	1,781	35,723
Shell "	16,024	8,17,044	10,903	4,46,518
Other kinds "	577	23,684	351	13,082
Oils—				
Vegetable, not essential Gals.	3,860	37,215	8,207	11,096
Other sorts ... .. "	.....	.....	.....	.....
Opium { Chests. }	.....	.....	.....	.....
" { Cwt. }	.....	602	.....	598
Provisions Cwt.	111,202	9,63,157	56,342	5,24,484
Saltpetre ... .. "	.....	.....	.....	.....
Seeds—				
Linseed "	725,110	39,46,590	567,696	34,14,019
Mustard and rape "	1,463	7,415	29	169
Poppy "	9	57	29	154
Teel or kingly "	19	124	198	1,581
Other sorts "	2,613	16,488	1,173	8,213
Silk—				
Raw lb	.....	.....	.....	.....
Manufactures Val.	.....	3,332	.....	5,682
Spices lb	846,967	72,427	460,828	41,079
Sugar, sugarcandy, and other saccharine produce ... Cwt.	22,020	2,21,044	70,087	7,23,467
Ten lb	1,883	1,643	9,392	8,463
Tobacco—				
Unmanufactured ... .. "	.....	.....	.....	.....
Manufactured ... .. "	.....	.....	.....	.....
Wax (excluding candles) Cwt.	168	150	204	247
Wood—				
Teak C. Tons	.....	.....	.....	.....
Other sorts Val.	.....	.....	.....	.....
Wool—				
Raw lb	.....	.....	.....	.....
Manufactures of—				
Shawls No.	4	1,080	2	200
Other sorts { lb }	2,412	3,489	4,860	4,383
" { Yds. }	5,688	74,393	230	67,430
All other articles unenumerated Val.	.....	.....	.....	.....
Indian produce and manufactures—				
Free ... .. "	.....	1,61,33,771	.....	1,63,26,017
Dutiable ... .. "	.....	26,15,643	.....	28,62,261
Total ... .. "	.....	1,87,49,414	.....	1,91,88,278
Total of Merchandise, Foreign and Indian ... ..	.....	1,87,81,272	.....	1,92,09,655
Treasure—				
Gold ... .. "	.....	.....	.....	.....
Silver ... .. "	.....	.....	.....	.....
Total ... .. "	.....	.....	.....	.....
Grand Total of Exports of Merchandise and Treasure ... ..	.....	1,87,81,272	.....	1,92,09,655
Government—				
Stores ... .. "	.....	.....	.....	.....
Treasure—				
Gold ... .. "	.....	.....	.....	.....
Silver ... .. "	.....	.....	.....	.....
Total of Treasure ... .. "	.....	.....	.....	.....
Total of Stores and Treasure ... ..	.....	.....	.....	.....

TRADE—continued.

Merchandise and Indian Produce and Manufactures, and Value of Treasure, during the official years 1876-77 and 1877-78—continued.

ARABIA.				CEYLON.			
1876-77.		1877-78.		1876-77.		1877-78.	
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
.....
.....
.....
9	11	.....	.....	67,401	78,294	55,271	83,015
6	68	28	1,533	.....	.....	2	9
.....	.....	.....	.....	79	97,850	89	1,09,253
.....	385	.....	380	115	1,912	131	14,501
.....	.....	.....	.....	905	3,575	692	3,146
.....	.....	.....	.....	.....	.....	210	1,320
.....	.....	.....	.....	.....	.....	150	929
.....	.....	.....	.....	.....	.....	40	240
.....	.....	.....	.....	2,619	16,222	6,551	42,017
.....	.....	.....	.....	6,274	64,653	10,506	1,59,767
.....
.....	11,738	.....	11,733	.....	19,225	.....	21,172
112	8	18,562	1,632	136,514	14,297	361,845	40,508
1,009	13,750	1,775	20,019	17,384	2,43,163	22,912	3,37,292
150	150	51	62	5,789	6,600	2,105	2,186
2,240	237	6,205	599	10,860	2,388	8,719	1,651
27,460	2,671	41,245	3,610	15,425	1,835	19,671	2,697
.....
.....	50	.....	12	.....	380	.....	1,074
.....
.....
.....
162	250	.....	.....	.....	.....	231	20
.....	5,720	.....	3,062	.....	1,474,021	10	375
.....	.....	.....	.....	.....	.....	.....	5,82,343
.....	38,049	.....	58,362	.....	21,20,666	.....	23,04,950
.....	11,21,613	.....	14,55,750	.....	82,85,185	.....	1,21,67,853
.....	11,59,662	.....	15,14,112	.....	1,04,05,851	.....	1,44,72,803
.....	11,66,162	.....	15,15,139	.....	1,95,03,432	.....	1,45,68,807
.....
.....	.....	.....	.....	.....	5,00,000	.....	.....
.....	.....	.....	.....	.....	5,00,000	.....	.....
.....	11,66,162	.....	15,15,139	.....	1,10,03,432	.....	1,45,68,807
.....
.....	.....	.....	.....	.....	35,832	.....	7,423
.....
.....
.....
.....	.....	.....	.....	.....	26,832	.....	7,428

II.—Quantities and Value of the Principal and Other Articles of Foreign exported to Foreign Countries from the Presidency of Bengal

ARTICLES.	CHINA.			
	1876-77.		1877-78.	
	Quantity.	Value.	Quantity.	Value.
INDIAN PRODUCE AND MANUFACTURES.				
Lac—				
Dye Cwt.	289	13,618	96	3,016
Shell "	4	183	4	172
Other kinds "				
Oils—				
Vegetable, not essential Gals.	75,436	89,103	91,573	1,29,230
Other sorts "	1	89	16	1,120
Opium { Chests	37,426	4,76,10,548	40,234	5,11,06,557
Provisions { Cwt.	64,383		59,004	
Saltpetre Val.		28,218		30,892
Seeds—				
Linseed Cwt.	59,909	5,35,473	58,230	5,79,524
Mustard and rape "	1	6	1	9
Poppy "		2		
Teel or gingelly "	1	5		
Other sorts "	1,053	5,836	295	2,499
Silk—				
Raw lb				
Manufactures Val.		698		1,809
Spices lb	27,552	2,454	1,322	162
Sugar, sugarcandy, and other saccharine produce Cwt.				7
Tea lb	2,910	2,346	8,992	8,084
Tobacco—				
Unmanufactured "			448	100
Manufactured "	4,137	1,683	5,318	1,356
Wax (excluding candles) Cwt.	7	643	182	16,146
Wood—				
Teak C.Tons.				
Other sorts Val.		2,680		2,382
Wool—				
Raw lb				
Manufactures of—				
Shawls No.	120	5,100	4	670
Other sorts lb	252	1,463	5	69
All other articles unenumerated Yds.	148		3	
		2,49,052		1,92,958
Indian produce and manufactures—				
Free		5,38,64,309		5,45,06,317
Dutiable		76,539		1,21,384
Total		5,39,40,848		5,46,27,701
Total of Merchandise, Foreign and Indian		5,39,87,299		5,46,99,593
Treasure—				
Gold		2,000		370
Silver		2,30,000		3,41,000
Total		2,32,000		3,41,370
Grand Total of Exports of Merchandise and Treasure		5,42,19,239		5,50,40,963
Government—				
Stores				28
Treasure—				
Gold				
Silver				
Total of Treasure				
Total of Stores and Treasure				28

TRADE—continued.

*Merchandise and Indian Produce and Manufactures, and Value of Treasure,
during the official years 1876-77 and 1877-78—continued.*

PERSIA.				STRAITS SETTLEMENTS.			
1876-77.		1877-78.		1876-77.		1877-78.	
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
.....
.....	.....	.....	.....	239	10,683	116	4,631
.....
.....	.....	.....	.....	108,095	1,26,069	124,065	1,74,588
.....	.....	.....	.....	67	3,756	48	4,701
.....	.....	.....	.....	9,701	1,19,09,395	9,357	1,13,21,524
.....	104	.....	82	14,175	1,02,180	13,727	1,20,254
.....	.....	.....	.....	8,076	73,256	3,659	39,679
.....
.....	.....	.....	.....	6	47	2	9
.....	.....	.....	.....	179	932	29	194
.....	.....	.....	.....	29	129	27	175
.....
.....	.....	.....	.....	9,304	64,535	10,422	70,088
.....
.....	9,065	.....	4,363	.....	.....	15	1,300
.....	.....	.....	.....	.....	39,587	.....	52,516
149	2,184	1	32	97,306	8,892	57,000	5,472
180	180	127	127	6	35	376	7,234
.....	.....	.....	.....	4,882	2,655	1,054	1,958
.....
414	37	1,451	131	7,392	1,596	21,571	3,504
.....	.....	.....	.....	76,210	12,181	76,058	10,550
.....	.....	.....	.....	3,475	3,07,428	2,573	2,21,878
.....
.....	.....	.....	.....	.....	5,651	.....	837
.....
.....
8	375	.....	.....	38	903	90	1,711
50	52	.....	.....	665	1,565	2,338	1,775
.....	412	.....	372	600	2,00,916	.....	2,94,333
.....
.....	13,512	.....	23,860	.....	1,15,22,074	.....	1,51,58,136
.....	4,01,966	.....	4,31,971	.....	2,11,763	.....	2,06,715
.....
.....	4,15,478	.....	4,55,831	.....	1,47,36,837	.....	1,53,61,851
.....
.....	4,19,122	.....	4,63,331	.....	1,59,76,023	.....	1,57,52,110
.....
.....
.....	.....	.....	.....	.....	17,697	.....	60
.....	.....	.....	.....	.....	17,910	.....	60
.....	.....	.....	.....	.....	55,607	.....	60
.....	4,19,122	.....	4,63,331	.....	1,51,11,630	.....	1,57,52,170
.....
.....	.....	.....	37	.....	1,60,760	.....	2,03,375
.....
.....
.....
.....
.....	.....	.....	37	.....	1,60,760	.....	2,03,375

H.—

II.—Quantities and Value of the Principal and Other Articles of Foreign exported to Foreign Countries from the Presidency of Bengal

ARTICLES.	AUSTRALIA.			
	1876-77.		1877-78.	
	Quantity.	Value.	Value.	Quantity.
INDIAN PRODUCE AND MANUFACTURES.				
Lac—				
Dye Cwt.	615	26,805	341	11,353
Shell "			4	180
Other kinds "				
Oils—				
Vegetable, not essential Gals.	268,534	2,18,950	428,847	5,60,898
Other sorts "				
Opium { Chest	8	10,480		
Provisions { Cwt.	11	13,888		12,452
Saltpetre Val.		16,185	1,156	11,061
Seeds—				
Linseed Cwt.	3,523	21,344	4,281	27,729
Mustard and rape "				
Poppy "				
Teel or gingelly "				
Other sorts "	12	100	2	65
Silk—				
Raw lb				
Manufactures Val.		519		35
Spices lb	2,576	292	9,613	810
Sugar, sugar-candy, and other saccharine produce... Cwt.	194	2,615		
Tea lb	42,179	42,677	22,717	21,329
Tobacco—				
Unmanufactured lb				
Manufactured "	76	38	43	60
Wax (excluding candles) Cwt.				
Wool—				
Wool—				
Raw lb				
Manufactures of—				
Shawls No.	1	60		
Other sorts { lb			196	200
All other articles unenumerated ... Val.		16,746		19,578
Indian produce and manufactures—				
Free		24,86,308		39,15,626
Dutiable		3,97,903		3,77,921
Total		28,84,211		42,93,547
Total of Merchandise, Foreign and Indian		28,97,324		43,31,560
Treasure—				
Gold				
Silver				
Total				
Grand Total of Exports of Merchandise and Treasure		28,97,324		43,31,560
Government—				
Stores				960
Treasure—				
Gold				
Silver				
Total of Treasure				
Total of Stores and Treasure				960

TRADE—continued.

Merchandise and Indian Produce and Manufactures, and Value of Treasure, during the official years 1876-77 and 1877-78,—concluded.

OTHER COUNTRIES.				TOTAL.			
1876-77.		1877-78.		1876-77.		1877-78.	
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
.....	.....	.....	.....	19,051	3,78,556	9,569	2,90,074
139	5,162	.....	.....	89,919	42,17,238	78,754	28,43,627
.....	.....	.....	.....	19,645	7,66,051	14,768	4,61,521
5,264	8,323	11,653	17,070	1,434,925	15,79,224	1,476,922	20,25,596
5	2,584	58	5,282	103	6,939	689	14,278
65	78,000	.....	.....	47,321	5,97,60,583	49,706	6,27,19,356
95	94,980	.....	1,06,917	68,837	7,60,823	72,800	7,77,749
4,812	43,887	9,170	96,356	462,713	37,89,225	388,636	37,89,618
15	70	47,530	2,45,350	3,524,451	1,83,50,186	5,199,353	2,97,73,810
37,934	1,08,123	7,414	32,874	1,102,518	56,06,252	1,851,016	1,04,22,385
.....	.....	.....	.....	334,916	17,54,372	447,354	26,32,155
730	4,580	287	2,580	248,567	15,12,835	258,387	17,85,470
7,134	37,144	3,914	19,940	24,852	1,93,983	40,110	3,08,695
.....	40,477	.....	15,243	1,410,371	77,48,844	1,494,950	70,20,328
116,367	13,303	130,193	10,852	.....	18,10,127	.....	10,60,739
7,681	1,10,423	6,615	98,182	4,291,960	4,25,253	2,255,757	2,06,256
2,419	2,686	1,634	1,635	637,628	68,56,050	445,817	45,70,847
1,320,819	1,08,180	314,732	25,322	27,529,198	2,76,07,947	33,186,878	3,01,73,900
81,693	9,487	99,067	16,617	9,413,403	6,09,058	9,279,995	5,52,927
.....	.....	45	3,638	211,393	32,563	249,131	45,894
32	3,284	26	2,580	3,782	3,49,704	3,117	2,70,562
.....	392	.....	184	.....	5,564	35	3,424
.....	.....	.....	.....	.....	9,211	.....	6,868
.....	.....	.....	.....	15,582	4,877	84,160	23,119
8	200	9	1,680	.....	804	30,024	1,161
344	425	84	205	.....	264,503	128,188	1,14,330
.....	62,470	51	28,870	.....	7,727	1,85,639	1,56,556
.....	.....	.....	.....	.....	29,60,298	.....	26,48,329
.....	26,10,522	.....	27,69,447	.....	21,45,47,391	.....	21,99,48,689
.....	28,41,910	.....	46,96,916	.....	4,99,19,091	.....	6,07,38,443
.....	54,52,432	.....	74,66,363	.....	26,14,56,482	.....	31,06,57,133
.....	55,18,903	.....	75,32,538	.....	26,59,60,184	.....	31,22,68,140
.....	2,64,681	.....	1,05,550	.....	19,697	.....	370
.....	2,64,681	.....	1,05,550	.....	10,18,611	.....	4,46,726
.....	57,83,584	.....	76,38,088	.....	10,38,308	.....	4,47,066
.....	100	.....	919	.....	26,60,98,492	.....	31,26,55,236
.....	.....	.....	.....	.....	2,04,395	.....	2,26,734
.....
.....
.....
.....	100	.....	919	.....	2,04,395	.....	2,26,734

H.—TRADE—continued.

III.—Statement of Customs Duty collected on the principal and other articles of merchandise subject to duty, on import and export, at ports in the Presidency of Bengal during the official years 1876-77 and 1877-78.

ARTICLES.	AMOUNT OF DUTY COLLECTED.			
	1876-77.		1877-78.	
	Gross.	Net.	Gross.	Net.
<i>Imports.</i>	Rs.	Rs.	Rs.	Rs.
Apparel	89,069	88,581	97,401	97,346
Cotton—				
Twist and yarn	3,57,844	3,57,282	4,21,986	4,21,184
Manufactures	44,47,091	44,36,255	55,13,144	55,06,700
Plated-ware and cutlery (including plated-ware).	94,762	93,972	1,04,854	1,03,093
Liquors—				
Ale, beer, and porter	31,563	34,534	39,549	39,515
Spirits	9,83,210	9,79,551	10,64,639	10,59,391
Wines and liquors	3,18,809	3,17,211	3,29,055	3,28,265
Other sorts	261	261	632	632
Metals—				
Copper	3,65,303	3,65,214	4,31,631	4,31,585
Iron	75,621	74,020	73,552	72,773
Tin	62,771	62,532	81,621	81,498
Other sorts	1,25,145	1,25,018	1,29,765	1,29,058
Provisions	62,059	61,981	71,986	74,892
Railway plant and rolling-stock	57,587	57,495	53,406	53,406
Salt	2,47,85,604	2,45,25,470	2,56,69,262	2,53,62,401
Silks	61,098	60,737	85,447	84,812
Spices	82,332	82,298	1,08,943	1,07,418
Sugar, sugarcandy, and other saccharine produce.	80	80	80	80
Wool, manufactures of	2,27,660	2,26,977	2,37,790	2,36,857
All other articles (including penalty duty) †.	6,75,535	6,65,940	6,92,191	6,84,672
Total duty on imports.	3,28,61,404	3,25,15,439	3,52,09,925	3,48,75,968
{ Including salt imports.	80,20,800	79,89,969	95,49,663	95,13,507
{ Excluding salt imports.				
<i>Exports.</i>				
Dyeing and colouring materials—				
Indigo	2,84,881	2,82,673	4,11,453	4,07,504
Grain and pulse—				
Rice (in the husk)	5,303	5,303	12,380	10,544
Rice (not in the husk)	15,62,004	15,29,023	16,36,073	15,96,894
Lac—				
Shell	2,88,505	2,87,230	1,59,652	1,53,332
Stick				
Other kinds	50,604	50,567	24,781	24,034
All other articles (including penalty duty) ...	425	425		
Total duty on exports	21,91,722	21,55,226	22,44,339	21,92,328†
		3,021*		
		21,52,205		
Grand Total duty on imports and exports	3,49,53,123	3,46,67,644†	3,74,54,264†	3,69,78,296

* There were refunds amounting to Rs. 3,021 on seeds, spices, &c., which were dutiable prior to the Tariff Act of August 1875.

† Less penalty duty, Rs. 1,185.

Rs. 11 on account of refunds paid on pulse and seeds not deducted.

TRADE—continued.

IV.—Total Value of Merchandise (distinguishing Country and Foreign) and Treasure imported and exported coastwise into and from the Presidency of Bengal in the official years 1876-77 and 1877-78.

PORTS.	MERCHANDISE.						TREASURE.	
	Country.		Foreign.		Total.			
	1876-77.	1877-78.	1876-77.	1877-78.	1876-77.	1877-78.	1876-77.	1877-78.
<i>Imports into Bengal.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>
From Bombay	41,15,680	80,87,767	8,36,890	7,54,686	49,52,570	88,42,453	9,633	18,611
" Sind	1,014	1,326	80	458	1,494	1,784	...	...
" Madras	51,53,902	34,84,671	3,82,238	3,69,455	55,36,140	38,54,326	3,04,007	26,53,586
" British Burmah ...	50,04,560	46,94,195	3,80,111	1,71,352	53,84,701	48,65,817	20,99,267	35,23,800
From British ports in other provinces, total.	1,42,75,165	1,62,68,250	15,99,349	12,96,151	1,58,74,514	1,75,64,410	24,13,543	56,38,903
From British ports within the Presidency.	29,80,134	44,90,456	31,18,420	48,86,103	61,28,554	93,76,559	31,86,600	36,23,330
From Goa ... ..	.....	.....	.....	119	.....	119	.....	.....
" Pondicherry	3,454	1,439	38,486	9,187	41,940	10,926	1,00,000	4,00,000
" Cutch	3,034	.....	250	.....	3,284	.....	.....	.....
" Kattywar (Bate) ...	7,455	.....	.....	.....	7,455	.....	.....	.....
" Cochin, Narrakal ...	4,391	1,75,363	20	140	4,411	1,75,503	.....	.....
" Travancore, Alleppey..	5,11,108	7,41,262	7,680	6,844	5,18,788	7,48,076	.....	.....
" " Colochel	100	.....	.....	500	100	500	.....	.....
From Indian ports not British, total.	5,29,542	9,18,064	46,436	17,060	5,75,978	9,35,124	1,00,000	4,00,000
From all ports, total ...	1,77,84,841	2,16,76,750	47,94,205	61,90,314	2,25,79,046	2,78,76,933	57,00,143	96,63,333
Government stores and treasure.	56,575	2,47,595	59,915	1,18,061	1,16,490	3,65,656	45,71,666	89,51,523
<i>Exports from Bengal.</i>								
To Bombay	1,32,38,801	2,15,46,710	4,09,947	5,02,678	1,37,38,748	2,20,49,388	.....	.....
" Sind	1,05,332	66,156	6,829	3,216	1,12,161	69,372	.....	.....
" Madras	3,52,46,000	6,19,95,021	36,87,802	42,04,010	4,29,35,802	6,62,00,534	26,99,658	2,51,1,677
" British Burmah ...	1,59,69,128	1,83,82,395	1,58,98,885	1,25,56,618	2,89,65,313	3,90,39,613	1,40,18,821	2,22,10,020
To British ports in other provinces, total.	6,76,59,561	10,19,90,885	1,80,93,463	1,72,67,452	8,57,53,024	11,92,58,997	1,67,17,912	2,24,61,487
To British ports within the Presidency.	39,11,356	49,23,773	50,78,430	49,17,922	89,89,786	98,46,693	47,16,005	41,04,687
To Goa	100	.....	30	.....	130	.....	.....	.....
" Pondicherry	4,93,552	9,79,500	19,687	9,668	5,13,239	9,89,168	1,00,000	.....
" Cutch	350	11,824	.....	170	350	11,994	.....	.....
" Cochin, Narrakal ...	3,73,891	5,72,003	183	610	1,74,071	5,72,613	.....	.....
" Travancore, Alleppey ...	62,300	23,844	1,098	1,927	63,485	24,871	53,373	69,000
" " Colochel	15,708	6,110	2,200	1,344	17,908	7,454	.....	.....
To Indian ports not British, total.	7,35,991	15,93,281	23,288	12,839	7,50,279	16,06,129	1,53,373	69,600
To all ports, total ...	7,23,03,908	10,85,12,939	2,31,95,181	2,21,98,213	9,55,02,089	13,07,11,152	2,15,87,200	2,66,35,774
Government stores and treasure.	11,96,244	7,29,099	3,34,159	4,35,814	15,30,402	11,65,513	53,88,000	9,22,500

H.—

V.—Number and Tonnage of Steam and Sailing Vessels, distinguishing their Countries at Ports in the Presidency of Bengal in the official

COUNTRIES WHENCE ENTERED AND TO WHICH CLEARED.			BRITISH (OTHER THAN BRITISH INDIAN).				BRITISH INDIAN.			
			Entered.		Cleared.		Entered.		Cleared.	
			Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
United Kingdom ...	Steam	...	143	241,975	153	235,276	...	...	...	...
...	Sailing	...	231	304,164	297	398,551	...	...	...	...
Austria ...	Steam	...	...	...	1	864	...	...	...	...
...	Sailing	...	...	...	...	...	...	...	...	...
France ...	Steam	...	1	1,021	5	5,380	...	...	...	...
...	Sailing	...	1	1,488	9	9,573	...	...	...	...
Germany ...	Steam	...	...	...	...	...	...	...	...	...
...	Sailing	...	...	...	...	...	...	...	...	...
Italy ...	Steam	...	1	897	11	15,228	...	...	...	...
...	Sailing	...	...	...	...	...	...	...	...	...
Africa, Eastern Coast	Steam	...	...	...	...	...	...	...	...	...
...	Sailing	...	...	...	...	...	...	...	...	...
Egypt ...	Steam	...	2	2,241	4	4,833	...	...	...	...
...	Sailing	...	...	...	...	...	...	...	...	...
Mauritius ...	Steam	...	...	...	...	...	...	...	...	...
...	Sailing	...	2	2,016	51	50,347	...	...	...	...
Réunion ...	Steam	...	...	...	...	...	...	...	...	...
...	Sailing	...	...	...	...	...	...	...	...	...
North America ...	Steam	...	...	...	...	...	...	...	...	...
...	Sailing	...	1	998	...	...	...	...	...	...
South America ...	Steam	...	...	...	1	810	...	...	...	...
...	Sailing	...	3	3,632	14	15,927	...	...	...	...
United States ...	Steam	...	1	978	2	3,538	...	...	...	...
...	Sailing	...	4	4,063	48	56,408	...	...	...	...
Arabia ...	Steam	...	...	...	...	...	...	...	...	...
...	Sailing	...	7	5,953	6	6,002	...	...	...	...
Ceylon ...	Steam	...	3	4,375	53	61,126	...	...	...	...
...	Sailing	...	4	3,664	12	6,616	6	1,163	2	516
China, Hong-Kong ...	Steam	...	24	32,970	24	32,969	...	...	...	...
...	Sailing	...	...	...	...	...	...	...	...	...
Java ...	Steam	...	...	...	...	...	...	...	...	...
...	Sailing	...	2	1,897	1	698	...	...	...	...
Maldives ...	Steam	...	...	...	...	...	...	...	...	...
...	Sailing	...	...	...	...	...	...	...	...	...
Persia ...	Steam	...	...	...	...	...	...	...	...	...
...	Sailing	...	1	872	2	1,571	...	...	...	...
Straits Settlements	Steam	...	31	19,007	39	26,015	...	...	...	...
...	Sailing	...	...	...	...	...	1	271	...	...
Australia ...	Steam	...	...	...	...	...	...	...	...	...
...	Sailing	...	37	43,078	16	13,375	...	...	...	...
Other countries ...	Steam	...	2	3,663	6	6,106	...	...	...	...
...	Sailing	...	8	6,707	27	19,540	...	...	...	...
Total, 1877-78	Steam	...	204	307,029	301	412,165	...	...	...	...
...	Sailing	...	301	378,524	485	579,008	7	1,434	2	516
Total, 1876-77	Steam	...	218	311,661	236	348,446	...	...	...	...
...	Sailing	...	328	407,247	438	513,722	21	4,544	10	2,361

1877-78.]

STATISTICAL RETURNS.

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TRADE—continued.

Nationality, which entered and cleared with Cargoes from and to Foreign year 1877-78, compared with the totals of the year 1876-77.

[illegible]

V.—*Number and Tonnage of Steam and Sailing Vessels, distinguishing their Countries at Ports in the Presidency of Bengal in the official*

COUNTRIES WHENCE ENTERED AND TO WHICH CLEARED.	OTHER NATIONALITIES.				TOTAL FOREIGN.			
	Entered.		Cleared.		Entered.		Cleared.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
United Kingdom ... { Steam { Sailing ...	.....	.....	.....	.....	3 6	2,510 7,829	..... 4	..... 5,753
Austria ... { Steam { Sailing ...	.....	.....	.....	.....	.....	.....	.....	.....
France ... { Steam { Sailing ...	.....	.....	.....	.....	15 1	12,881 614	3 3	2,837 1,532
Germany ... { Steam { Sailing ...	.....	.....	.....	.....	.....	.....	.....	.....
Italy ... { Steam { Sailing ...	.....	.....	.....	.....	3 2	2,670 1,518	4	3,534
Africa, Eastern Coast ... { Steam { Sailing ...	.....	.....	.....	.....	.....	.....	1	309
Egypt ... { Steam { Sailing ...	.....	.....	.....	.....	.....	.....	.....	.....
Mauritius ... { Steam { Sailing ...	.....	.....	.....	.....	.....	.....	37	21,014
Réunion ... { Steam { Sailing ...	.....	.....	1	229	.....	.....	9	4,481
North America ... { Steam { Sailing ...	.....	.....	.....	.....	.....	.....	.....	.....
South America ... { Steam { Sailing ...	.....	.....	.....	.....	.....	.....	.....	.....
United States ... { Steam { Sailing ...	1	229	1	801	12	12,473	17	19,170
Arabia ... { Steam { Sailing ...	5	4,125	4	3,162	9	6,775	8	5,512
Ceylon ... { Steam { Sailing ...	.....	.....	.....	.....	1	822	14 3	11,691 1,310
China, Hong-Kong ... { Steam { Sailing ...	.....	.....	1	795	.....	.....	1	795
Java ... { Steam { Sailing ...	.....	.....	1	887	1	347	1	887
Maldives ... { Steam { Sailing ...	.....	.....	.....	.....	.....	.....	1	89
Persia ... { Steam { Sailing ...	1	647	1	647	1	647	1	647
Straits Settlements ... { Steam { Sailing ...	.....	.....	.....	.....	.....	.....	.....	.....
Australia ... { Steam { Sailing ...	.....	.....	1	1,309	1	1,410	1	1,309
Other countries ... { Steam { Sailing ...	1	253	2	595	1	253	7	3,086
Total, 1877-78 ... { Steam { Sailing ...	8	5,554	2 10	1,682 6,723	22 34	18,883 31,866	23 92	19,714 64,215
Total, 1876-77 ... { Steam { Sailing ...	1 8	849 5,884	2 5	818 4,099	21 49	17,761 42,350	26 110	22,323 76,286

TRADE—continued.

Nationality, which entered and cleared with Cargoes from and to Foreign year 1877-78, compared with the totals of the year 1876-77—concluded.

NATIVE CRAFT.				GRAND TOTAL, 1877-78.				GRAND TOTAL, 1876-77.			
Entered.		Cleared.		Entered.		Cleared.		Entered.		Cleared.	
Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
.....	146	244,485	155	255,276	110	229,021	112	202,168
.....	237	311,993	301	401,304	264	344,462	251	335,961
.....	1	864	.....	.....	.....	.....
.....	16	13,902	8	8,217	6	5,115	14	16,119
.....	2	2,102	12	11,165	7	4,659	3	4,137
.....	1	1,529
.....	4	3,567	15	18,762	6	5,180	5	6,527
.....	2	1,518	.....	.....	2	2,943	.....	.....
.....	3	411	.....	.....	4	720	.....	.....	6	742
.....	2	2,241	4	4,833	4	4,032	.....	.....
.....	1	1,423	.....	.....
.....	2	2,016	88	71,361	10	8,432	15	72,301
.....	9	4,484	1	843	1	883
.....	1	998	.....	.....	6	3,161	13	5,948
.....
.....	3	3,632	14	15,927	7	9,482	23	29,658
.....	1	978	2	3,558	.....	.....	4	6,731
.....	16	16,528	65	75,578	11	13,082	64	81,476
.....
1	134	25	176	17	12,862	18	11,750	24	18,923	16	12,614
.....	4	5,197	67	74,817	12	12,859	51	60,333
9	974	3	486	19	5,801	20	8,958	32	9,402	46	25,217
.....	24	32,470	25	34,764	23	27,270	25	30,745
.....	1	1,269	.....	.....
.....	1	887	1	1,370	.....	.....
.....	3	2,244	1	898	1	927	1	927
.....
21	2,185	25	2,684	21	2,185	26	2,773	30	3,150	36	3,515
.....	2	1,519	3	2,218	2	1,480	2	1,519
.....	31	19,067	39	26,015	45	34,857	40	27,023
.....	1	271	.....	.....	3	2,967	.....	.....
.....	38	44,488	17	14,834	23	23,716	18	15,829
.....	2	3,465	6	6,106	1	1,865	9	13,212
.....	9	6,960	84	22,626	14	10,665	28	12,640
.....	230	325,912	324	431,909	.....	.....	.....	.....
31	3,293	33	3,767	373	415,117	612	647,546	.....	.....	.....	.....
.....	24	352,422	262	385,709
40	4,131	44	4,385	.....	.....	.....	.....	438	454,272	602	696,564

II.—

VI.—*Number and Tonnage of Steam and Sailing Vessels, distinguishing their Countries at Ports in the Presidency of Bengal in the official*

COUNTRIES WHENCE ENTERED AND TO WHICH CLEARED.			BRITISH (OTHER THAN BRITISH INDIAN).				BRITISH INDIAN.			
			Entered.		Cleared.		Entered.		Cleared.	
			Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
United Kingdom ...	{ Steam ...	1	1,131	...	...	...	...	...	...	...
	{ Sailing ...	5	6,544	...	...	...	...	...	...	...
France ...	{ Steam ...	1	1,319	...	...	...	...	...	...	...
	{ Sailing ...	...	...	...	...	...	...	...	...	...
Holland ...	{ Steam ...	1	1,686	...	...	...	...	...	...	...
	{ Sailing ...	...	...	...	...	...	...	...	...	...
Italy ...	{ Steam ...	1	989	...	...	...	...	...	...	...
	{ Sailing ...	...	...	...	...	...	...	...	...	...
Russia ...	{ Steam ...	1	1,221	...	...	...	...	...	...	...
	{ Sailing ...	...	...	...	...	...	...	...	...	...
Africa, Eastern Coast ...	{ Steam ...	...	...	...	...	...	...	...	...	...
	{ Sailing ...	...	...	...	...	...	...	...	...	...
Egypt ...	{ Steam ...	11	11,633	...	...	...	...	...	...	...
	{ Sailing ...	...	...	...	...	...	...	...	...	...
Mauritius ...	{ Steam ...	23	36,551	...	...	...	...	...	...	...
	{ Sailing ...	...	...	...	...	...	...	...	...	...
Réunion ...	{ Steam ...	1	1,286	...	...	...	...	...	...	...
	{ Sailing ...	...	...	...	...	...	...	...	...	...
South America ...	{ Steam ...	8	9,207	...	...	...	...	...	...	...
	{ Sailing ...	...	...	...	...	...	...	...	...	...
United States ...	{ Steam ...	...	...	...	...	...	...	...	...	...
	{ Sailing ...	...	...	...	...	...	...	...	...	...
Ceylon ...	{ Steam ...	42	51,334	...	...	...	...	...	...	...
	{ Sailing ...	22	29,061	1	589	6	2,065	...	...	...
Java ...	{ Steam ...	...	...	...	...	...	...	...	...	...
	{ Sailing ...	...	...	...	...	...	...	...	...	...
Maldives ...	{ Steam ...	...	...	...	...	...	...	...	...	...
	{ Sailing ...	...	...	...	...	...	...	...	...	...
Straits Settlements ...	{ Steam ...	1	1,266	...	...	...	...	...	...	...
	{ Sailing ...	13	11,233	...	...	...	...	...	...	...
Sumatra ...	{ Steam ...	...	...	...	...	...	...	...	...	...
	{ Sailing ...	...	...	...	...	...	...	...	...	...
Australia ...	{ Steam ...	32	42,150	...	...	...	...	...	...	...
	{ Sailing ...	...	...	...	...	...	...	...	...	...
Other countries ...	{ Steam ...	10	11,483	1	1,660	...	...	...	...	...
	{ Sailing ...	30	27,383	...	...	...	...	...	...	...
Total, 1877-78 ...			67	79,057	1	1,080	...	...	...	...
	{ Sailing ...	141	157,450	1	589	6	2,065	...	...	...
Total, 1876-77 ...			29	37,537	...	...	...	...	...	...
	{ Sailing ...	114	108,733	...	...	4	558	...	...	...

VI.—*Number and Tonnage of Steam and Sailing Vessels, distinguishing their Countries at Ports in the Presidency of Bengal in the official*

COUNTRIES WHENCE ENTERED AND TO WHICH CLEARED.			OTHER NATIONALITIES.				TOTAL FOREIGN.			
			Entered.		Cleared.		Entered.		Cleared.	
			Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
United Kingdom ...	{ Steam	...	.....	.....	.....	.....	.....	.....	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
France ...	{ Steam	...	.....	.....	.....	.....	.....	.....	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
Holland ...	{ Steam	...	.....	.....	.....	.....	.....	.....	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
Italy ...	{ Steam	...	.....	.....	.....	.....	.....	.....	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
Russia ...	{ Steam	...	.....	.....	.....	.....	.....	.....	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
Africa, Eastern Coast	{ Steam	...	.....	.....	.....	.....	.....	.....	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
Egypt ...	{ Steam	...	.....	.....	.....	.....	.....	.....	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
Mauritius ...	{ Steam	...	.....	.....	.....	.....	9	7,385	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
Réunion ...	{ Steam	...	.....	.....	.....	.....	11	5,836	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
South America ...	{ Steam	...	.....	.....	.....	.....	3	4,040	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
United States...	{ Steam	...	.....	.....	.....	.....	.....	.....	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
Ceylon ...	{ Steam	...	.....	.....	.....	.....	2	2,136	.....	.....
	{ Sailing	...	.....	.....	.....	.....	9	4,271	.....	.....
Java ...	{ Steam	...	.....	.....	.....	.....	1	.....	.....	.....
	{ Sailing	...	.....	.....	.....	.....	2	982	.....	.....
Maldives ...	{ Steam	...	.....	.....	.....	.....	.....	.....	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
Straits Settlements ...	{ Steam	...	2	2,158	.....	.....	2	2,158	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
Sumatra ...	{ Steam	...	.....	.....	.....	.....	.....	.....	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
Australia ...	{ Steam	...	1	1,307	.....	.....	2	2,602	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
Other countries ...	{ Steam	...	2	882	.....	.....	2	882	.....	.....
	{ Sailing	...	.....	.....	.....	.....	.....	.....	.....	.....
Total, 1877-78 ...	{ Steam	...	2	2,158	.....	.....	4	4,294	.....	.....
	{ Sailing	...	3	2,189	.....	.....	38	25,998	.....	.....
Total, 1876-77 ...	{ Steam	...	1	795	4	3,112
	{ Sailing	...	1	250	34	18,436

1877-78.]

STATISTICAL RETURNS.

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TRADE—continued.

Nationality, which entered and cleared with Ballast from and to Foreign year 1877-78, compared with the totals of the year 1876-77—concluded.

NATIVE CRAFT.				GRAND TOTAL, 1877-78.				GRAND TOTAL, 1876-77.			
Entered.		Cleared.		Entered.		Cleared.		Entered.		Cleared.	
Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
.....	1	1,131	.....	.....	1	3,724	.....	.....
.....	5	6,514	.....	.....	7	9,578	.....	.....
.....	1	1,349	.....	.....	1	600	.....	.....
.....	1	1,686	.....	.....	.....	.....	.....	.....
.....	1	989	.....	.....	.....	.....	.....	.....
.....	1	1,221	.....	.....	2	1,890	.....	.....
.....	1	208	.....	.....
.....	11	11,633	.....	.....	2	2,492	.....	.....
.....	57	43,936	.....	.....	29	25,515	.....	.....
.....	12	7,122	.....	.....	13	6,389	.....	.....
.....	11	13,217	.....	.....	12	13,165	.....	.....
.....	1	1,262	.....	.....
1	95	.....	.....	44	53,470	.....	.....	20	25,311	.....	.....
.....	38	26,492	1	589	20	16,168	.....	.....
.....	2	982	.....	.....	.....	.....	.....	.....
.....	2	203	.....	.....
.....	3	3,124	.....	.....	6	1,733	.....	.....
1	81	.....	.....	14	11,314	.....	.....	6	3,198	.....	.....
.....	1	860	.....	.....
.....	34	44,752	.....	.....	15	19,360	.....	.....
.....	10	11,183	1	1,060	5	5,060	.....	.....
.....	32	28,265	.....	.....	37	39,851	.....	.....
.....	71	83,351	1	1,060	.....	.....	.....	.....
2	176	.....	.....	187	185,689	1	589	.....	.....	.....	.....
.....	33	40,619	.....	.....
2	203	.....	.....	.....	.....	.....	.....	154	127,950	.....	.....

H.—

VII.—*Number and Tonnage of Steam and Sailing Vessels, distinguishing with cargoes and in ballast in the Presidency of Bengal in the*

PORTS.	BRITISH.			
	Entered.		Cleared.	
	Vessels.	Tons.	Vessels.	Tons.
<i>With Cargoes.</i>				
From or to—Bombay { Steam	91	88,444	129	144,952
... .. { Sailing	18	18,256	10	9,229
Sind { Steam ... ..	.....	.....	1	475
... .. { Sailing ... ..	.....	.....	.....	.....
Madras { Steam	78	80,933	230	273,380
... .. { Sailing	28	13,547	94	49,200
British Burmah ... { Steam	123	78,243	112	66,168
... .. { Sailing	12	11,755	8	6,850
British ports in other { Steam	292	247,620	472	484,975
provinces, total. { Sailing	68	43,558	112	65,279
British ports within { Steam	284	134,569	271	107,339
the province. { Sailing	6	3,488	4	2,559
Indian ports not { Steam	2	1,707	6	7,784
British. { Sailing ... ..	.....	.....	2	1,264
Total 1877-78 ... { Steam	678	383,887	749	600,498
... .. { Sailing	C.	47,016	118	69,102
Total, 1876-77 ... { Steam	581	358,577	637	447,139
... .. { Sailing	72	61,968	143	98,227
<i>In Ballast.</i>				
From or to—Bombay { Steam	54	66,559	7	8,163
... .. { Sailing	37	36,272	.....	.....
Sind { Steam	2	2,964	.....	.....
... .. { Sailing	7	8,567	.....	.....
Madras { Steam	155	182,943	1	3,724
... .. { Sailing	67	62,005	.....	.....
British Burmah ... { Steam	1	462	2	1,776
... .. { Sailing ... ..	.....	.....	2	1,794
British ports in other { Steam	212	252,928	10	13,663
provinces, total. { Sailing	111	96,844	2	1,794
British ports within { Steam	6	6,008	18	16,239
the province. { Sailing	7	2,348	2	830
Indian ports not { Steam	5	7,576	.....	.....
British. { Sailing	2	2,004	.....	.....
Total, 1877-78 ... { Steam	223	266,572	28	20,962
... .. { Sailing	120	101,196	4	2,633
Total, 1876-77 ... { Steam	79	88,336	31	33,662
... .. { Sailing	99	82,178	5	2,807

1877-78.]

STATISTICAL RETURNS.

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TRADE—continued.

their Nationality, employed in the Interportal Trade, which entered and cleared official year 1877-78, compared with the totals of the year 1876-77.

BRITISH INDIAN.				FOREIGN.			
Entered.		Cleared.		Entered.		Cleared.	
Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
.....	.....	.....	.....	2	2,706	4	5,108
.....	.....	.....	.....	9	10,093	7	9,793
.....
.....
5	972	3	873	10	1,039	33	2,010
.....	.....	.....	.....	.....	.....	.....	15,689
17	3,134	16	4,198	1	469	1	469
.....	.....	.....	.....	2	1,581	1	597
22	4,406	19	5,671	3	3,115	7	7,527
.....	.....	.....	.....	21	15,713	41	26,079
.....
.....	.....	.....	.....	.....	.....	1	395
.....
.....	.....	.....	.....	1	92	4	2,502
22	4,406	19	5,671	3	3,115	7	7,527
.....	.....	.....	.....	23	15,805	46	28,976
32	8,144	20	5,753	11	7,057	13	9,628
.....	.....	.....	.....	25	15,174	32	21,437
.....
.....	.....	.....	.....	9	4,736	.....	.....
.....
.....
7	2,056	1	192	1	1,065	.....	.....
.....	.....	.....	.....	19	9,781	.....	.....
1	257	18	3,756	1	155	.....	.....
8	2,313	19	3,318	1	1,065	.....	.....
.....	.....	.....	.....	29	13,972	.....	.....
1	319	.....	.....	3	1,641	1	699
.....	.....	.....	.....	.....	.....	2	1,299
.....	.....	.....	.....	20	8,964	.....	.....
9	2,632	19	3,918	1	1,065	1	699
.....	.....	.....	.....	62	24,581	2	1,299
2	384	17	3,915	3	2,473	.....	.....
.....	.....	.....	.....	96	23,697	.....	1,466

H.—

VII.—*Number and Tonnage of Steam and Sailing Vessels, distinguishing with cargoes and in ballast in the Presidency of Bengal in the official*

PORTS.	NATIVE CRAFT.			
	Entered.		Cleared.	
	Vessels.	Tons.	Vessels.	Tons.
<i>With Cargoes.</i>				
From or to—Bombay { Steam ... ..	.....	.....	.....	.....
... .. { Sailing ... ..	.....	.....	.....	.....
Sind { Steam ... ..	.....	.....	.....	.....
... .. { Sailing ... ..	.....	.....	.....	.....
Madras { Steam ... ..	.....	.....	.....	.....
... .. { Sailing	163	17,628	199	20,755
British Burmah { Steam ... ..	.....	.....	.....	.....
... .. { Sailing	1	254	.....	.....
British ports in other provinces, total. { Steam ... ..	.....	.....	.....	.....
... .. { Sailing	164	17,882	199	20,755
British ports within the province. { Steam ... ..	.....	.....	.....	.....
... .. { Sailing	144	7,826	249	9,850
Indian ports not British. { Steam ... ..	.....	.....	.....	.....
... .. { Sailing	2	230	1	119
Total, 1877-78 ... { Steam ... ..	.....	.....	.....	.....
... .. { Sailing	340	25,938	449	30,724
Total, 1876-77 ... { Steam ... ..	.....	.....	.....	.....
... .. { Sailing	174	15,023	341	23,510
<i>In Ballast.</i>				
From or to—Bombay { Steam ... ..	.....	.....	.....	.....
... .. { Sailing	1	117	.....	.....
Sind { Steam ... ..	.....	.....	.....	.....
... .. { Sailing ... ..	.....	.....	.....	.....
Madras { Steam ... ..	.....	.....	.....	.....
... .. { Sailing	79	5,872	.....	.....
British Burmah { Steam ... ..	.....	.....	.....	.....
... .. { Sailing ... ..	.....	.....	1	216
British ports in other provinces, total. { Steam ... ..	.....	.....	.....	.....
... .. { Sailing	80	5,989	1	216
British ports within the province. { Steam ... ..	.....	.....	.....	.....
... .. { Sailing	114	2,649	32	1,738
Indian ports not British. { Steam ... ..	.....	.....	.....	.....
... .. { Sailing	1	151	.....	.....
Total, 1877-78 ... { Steam ... ..	.....	.....	.....	.....
... .. { Sailing	195	8,789	33	1,951
Total, 1876-77 ... { Steam ... ..	.....	.....	.....	.....
... .. { Sailing	140	7,408	13	558

TRADE—concluded.

their Nationality, employed in the Interportal Trade, which entered and cleared year 1877-78, compared with the totals of the year 1876-77—concluded.

TOTAL, 1877-78.				TOTAL, 1876-77.			
Entered.		Cleared.		Entered.		Cleared.	
Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
93	91,150	133	150,069	78	87,071	90	107,264
27	28,349	17	13,023	23	24,125	18	18,011
.....	.....	1	175	.....	.....	2	1,044
.....	.....	.....	.....	2	185	.....	.....
78	80,933	232	275,390	72	79,441	118	137,129
206	30,186	329	86,517	121	56,612	291	167,141
14	78,052	113	66,577	122	67,744	121	63,225
32	17,024	25	11,645	32	17,572	47	7,559
205	250,735	479	492,592	272	230,216	341	308,662
265	81,559	371	117,184	178	78,732	293	132,421
234	134,590	271	167,339	320	135,388	313	111,354
150	11,314	254	12,804	116	11,284	256	15,197
2	1,707	6	7,784	.....	.....	6	6,751
3	322	7	3,885	9	4,132	1	3,339
581	387,002	750	607,625	.....	.....	.....	.....
418	93,195	632	154,875	.....	.....	.....	.....
.....	.....	.....	.....	592	955,674	650	424,767
.....	.....	.....	.....	303	91,268	556	148,957
51	66,559	7	8,163	30	38,204	15	19,984
47	40,125	.....	.....	46	46,370	.....	.....
2	2,964	.....	.....	.....	.....	.....	.....
7	8,507	.....	.....	5	1,610	.....	.....
156	183,948	1	3,724	38	45,419	1	1,317
172	69,714	1	192	82	11,299	.....	.....
1	462	2	1,776	4	1,016	3	2,630
2	712	21	5,706	1	75	17	3,915
213	253,983	10	15,663	73	84,639	19	23,921
228	119,118	22	5,958	134	95,354	17	3,915
6	6,668	19	16,929	5	1,371	12	9,741
125	6,959	36	3,876	125	9,334	22	1,841
5	7,576	.....	.....	4	4,799	.....	.....
23	11,121	.....	.....	18	8,886	.....	.....
224	267,577	29	30,592	.....	.....	.....	.....
376	137,198	58	9,834	.....	.....	.....	.....
.....	.....	.....	.....	82	20,809	31	83,662
.....	.....	.....	.....	277	113,574	39	3,746

I.—COINAGE AND

I. *Coinage,*

BULLION OR COIN RECEIVED INTO THE MINT FOR COINAGE DURING 1877-78.						COINED DURING			
In lb troy.			In lb avoird.						
Gold.		Silver.		Copper.		Gold.	Silver.		
By State.	Private.	By State.	Private.	By State.	Private.	Single mohurs.	Rupees.	Half rupees.	Quarter rupees.
Nil	5,035	20,993	16,43,337	14,58,020	Nil	10,424 Value Rs. 1,56,360*	Rs. 4,97,54,691	858,336 Value Rs. 4,29,768	3,550,131 Value Rs. 8,87,582 12

* Gold mohurs are arbitrarily converted at Rs. 15 each, but they are not.
NOTE—The following are the number and value of the

Cents	...	...	...	...
Five cents	...	...	...	...
Cents	...	...	...	...

CURRENCY.

1877-78.

THE YEAR 1877-78.				Sovereigns received during 1877-78.	ESTIMATED VALUE OF COIN IN CIRCULATION.					
Copper.					Gold.	Silver.	Copper.			
Eighth rupees.	Double pie.	Single pie.	Pie pieces.		Native.	Government.	Native.	Government.	Native.	Government.
3,574,570	3,584,000	65,200,000	5,880,000	3,299						
Value	Value	Value	Value				(Not known.)			
Rs.	Rs.	Rs.	Rs.							
4,46,821-4	1,12,000	10,18,900	30,625							

legal tender, and sold by weight at the current price of gold.
 coins coined for the Straits and Ceylon :—

Straits.	Number.	Value in Rs.
	6,652,000	1,40,670
Ceylon.	256,000	12,500
	820,000	8,200

I.—COINAGE AND

2. Paper Currency.

NOTES IN CIRCULATION AT THE BEGINNING OF THE YEAR OR 31ST MARCH 1877.					NOTES IN CIRCULATION AT THE END OF THE YEAR OR 31ST MARCH 1878.		
Small notes under Rs. 50.	Notes of Rs. 50 and under Rs. 500.	Large notes of Rs. 500 and upwards.	Total value of Calcutta notes issued during the year.	Total value of Calcutta notes cashed during the year.	Small notes under Rs. 50.	Notes of Rs. 50 and under Rs. 500.	Large notes of Rs. 500 and upwards.
			Rs.	Rs.			
Pieces ... 1,272,730	147,384	34,459			Pieces ... 1,384,990	154,506	32,009
			57,07,242½	58,41,05,675½			
Rs.	Rs.	Rs.			Rs.	Rs.	Rs.
Value ... 1,48,87,903a	1,19,46,750a	2,81,88,000a			Value 1,59,97,675b	1,25,83,000b	3,98,83,500b

a. Rs. 4,85,945 realized
b. Rs. 45,995 realized

CURRENCY.

for the year 1877-78.

RESERVE AT END OF THE YEAR, OR 31ST MARCH 1878, STATED IN RUPEES.

Coin.			Bullion.			Securities.		Notes.			
Gold.	Silver.	Copper.	Gold.	Silver.	Copper.			Alahabad.	Lahore.	Nagpore (Calcutta Series).	Other circles.
	Held at Bom- bay,			Rs.	A. P.	Rs.	A. P.	Rs.	Rs.	Rs.	Rs.
...	Pieces 3,700,000 Rs. 53,45,406-6-0										
	Held at Nag- pore,										
...	Pieces 300,000 Rs. 40,00,000			72,17,847	0 11	2,51,32,465	9 1	14,38,960	9,21,455	1,010	2,10,47,035

by other offices of issue.
by other offices of issue.

K.—CHARITABLE INSTITUTIONS.
Charitable Institutions under Government Superintendence in the Province of Bengal during 1877.

CLASS AND OBJECT OF INSTITUTIONS.	Number of institutions.	Average number of persons daily aided.	Total aided in year.	INCOME.				NUMBER OF INSTITUTIONS WHICH AFFORD RELIEF.		In what shape relief is given.
				Paid by Government.	FROM EXPENDIMENT.		Subscriptions and donations.			
					In land.	In money.				
				Rs. A. P.	Rs. A. P.	Rs. A. P.		In-door.	Out-door.	
<i>Government Institutions.</i>										
College Hospital for Europeans and Natives	1	305-91	52,473	1,09,358 2 1	.....	2,63	6,393 0 0	1	1	1
General Hospital for Europeans and Natives	1	335-02	25,392	1,44,904 14 4	.....	210 0 0	25,995 9 6	1	1	1
Campbell Hospital	1	345-16	6,953	37,314 13 0	.....	.....	30,000 0 0	1	.....	.....
Mayo Native Hospital and its Dispensaries	4	1302-82	190,030	30,306 6 0	.....	17,420 9 10	5,211 0 0	2	5	.....
Howrah Hospital for Europeans and Natives	1	206-19	21,790	3,133 0 0	.....	633 8 0	25,533 2 1	1	1	1
Lunatic Asylums	1	29	16,607	0 0	.....	.....	16,600 0 0	.....	.....	.....
For Europeans	7	1117-03	1,416	1,11,753 15 3	.....	.....	1,704 1. 3	.....	.....	.....
For Natives										
<i>Supplied by Public with Government assistance.</i>										
Hospitals and Dispensaries principally to afford in-door and out-door relief to Natives	230	9906-66	862,178	1,34,740 4 1	.....	24,601 7 11	2,76,023 15 7	143	239	239
Total	246	13617-79	1,169,294	5,58,263 6 9	.....	44,930 13 8	3,93,557 6 5	157	297	297
Medical and surgical.										

Medical and surgical.

PART IV. STATISTICS OF INSTRUCTION.

A.—ECCLESIASTICAL.

Return of persons according to religious denominations in the Bengal Presidency for the year 1876-77.

	2	3		4	5	6	7
DENOMINATION.	NUMBER OF PERSONS IN CALCUTTA ONLY.	NUMBER OF PERSONS OUTSIDE CALCUTTA.		Number of ministers or priests.	Number of churches or buildings dedicated or used for public worship.	Total annual income from Government.	REMARKS.
	Natives and others.	a. Natives.	b. Others.				
						Rs. A. P.	
Church of England ...	9,962	22,170	5,660	101	139	2,05,676 1 11	
Church of Scotland ...	1,341	285	281	14	11	20,218 8 0	
Protestant Dissenters ...	953	16,614	657	143	239	.....
Roman Catholics ...	9,087	16,889	2,142	71	86	*6,300 0 0	
Greek Church ..	120	1	18	1	1	.....
Armenians ...	576	47	116	8	3	.....
Christian (sects not stated) ...	2,744	26,479	50	..	..	.....
Syrians ...	.....	.....	2	...	...	.....
Jews ...	952	51	67	3	2	.....
Parsees ...	161	54	.....	4	1	.....
Hindus ...	278,224	37,224,477	350	...	...	.....
Muhammadans ...	123,556	19,279,937	10	...	...	.....
Buddhists ...	1,878	98,651	1	..	.....	.....
Jains ...	.....	2,122	.....	...	.....	.....
Sikhs ...	281	679	.....	..	.....	.....
Other sects... ..	608	5,635,886	10	...	.....	.....
Total ...	420,535	62,324,322	9,414	345	482	2,25,045 10 11	

* Exclusive of the pay, &c., of Roman Catholic Chaplains attached to regiments, which are adjusted in the Military Department.

B.—EDUCATION.

1.—The University Result of the Examinations of the University of Calcutta for the official year beginning 1st April 1877 and ending 31st March 1878.

NATURE OF EXAMINATION.	NUMBER OF INSTITUTIONS SENDING UP CANDIDATES.				NUMBER OF CANDIDATES SENT UP.				NUMBER OF CANDIDATES PASSED.				RELIGION OR NATIONAL CLASSIFICATION OF PASSED STUDENTS.							
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Natives of India.			
																	Government institutions.	Private institutions.	Total.	From Government institutions.	From private institutions.	Total.	Christians.	Hindus.	Muslimans.	Others.	Europeans.
Entrance Examination ...	95	193	288	1,154	1,432	84	2,720	604	545	17	1,186	93	980	67	26	.....	.....	
Arts ...	16	14	30	440	260	91	791	153	81	17	253	12	217	11	13	.....	.....	
	17	7	24	120	57	57	238	43	16	9	63	6	55	3	5	.....	.....	
	8	3	11	33	17	2	58	17	2	2	20	1	19	1	.....	.....	1	
	7	2	9	17	4	2	23	6	.....	.....	8	.....	7	.....	.....	.....	.....
Law ...	7	.....	7	61	.....	.....	61	29	.....	.....	29	.....	29	.....	.....	.....	.....
	1	.....	1	1	.....	.....	1	1	.....	.....	1	.....	1	.....	.....	.....	.....
Medicine ...	1	.....	1	104	.....	.....	104	60	.....	.....	60	.....	60	.....	.....	.....	.....
	1	.....	1	91	.....	.....	91	34	.....	.....	34	.....	31	.....	.....	.....	.....
	1	.....	1	22	.....	.....	22	17	.....	.....	17	.....	16	.....	.....	.....	.....
	1	.....	1	10	.....	.....	10	7	.....	.....	7	.....	6	.....	.....	.....	.....
			
Engineering ...	1	.....	1	24	.....	.....	24	8	.....	.....	8	.....	8	.....	.....	.....	.....
	1	.....	1	10	.....	.....	10	3	.....	.....	3	.....	3	.....	.....	.....	.....
			
Total	137	219	376	2,687	1,802	255	4,124	984	641	46	1,674	112	1,482	85	44	1	1			

B.—EDUCATION—*continued.*

—Return of Colleges and Schools, and the Scholars attending them, for the official year beginning 1st April 1877 and ending 31st March 1878.

B.—

2.—Return of Colleges and Schools, and the Scholars attending them,

CLASS OF INSTITUTIONS.	GOVERNMENT INSTITUTIONS.										All			
	Number of institutions.	Number of students on the rolls on 31st March 1878.	Average daily attendance.	Number of scholars on 31st March learning through		Religion of students as on 31st March.				Number of institutions.	Number of students on the rolls on 31st March 1878.	Average daily attendance.	Number of scholars on 31st March learning through	
				English.	Vernacular only.	Christians.	Hindus.	Muhammadans.	Others.				English.	Vernacular only.
<i>Colleges.</i>														
Colleges or Departments of Colleges affiliated to the University—														
Arts	12	1,082	792	1,072	...	11	1,014	57	...	6	701	438	701	...
Law	6	316	211	316	...	3	293	19	1	...	...	...	...	...
Medicine	1	145	241	145	...	38	102	12	3	...	...	...	...	...
Engineering	1	87	85	87	...	4	82	1	...	...	...	...	...	...
Colleges or Departments of Colleges not affiliated to the University—														
Madrasahs	5	611	417	150	461	...	...	611	...	...	...	...	...	...
Medical Vernacular Schools.	4	686	511	...	686	6	551	129	...	...	...	...	...	...
<i>Normal Schools.</i>														
For Masters	24	671	521	41	627	1	531	52	87	11	714	683	115	...
For Mistresses ... ..	...	...	...	...	...	...	...	...	...	4	61	53	36	...
School of Art	1	89	66	36	49	...	...	8	1	...	...	...	...	...
Survey Vernacular Schools.	4	160	117	20	140	...	113	47	...	...	...	...	...	...
Other Technical Schools.	4	148	122	40	108	59	63	26	...	...	...	...	...	...
<i>Schools for Boys (Native).</i>														
Higher class English	48	12,875	9,660	12,870	5	125	10,602	2,096	52	84	9,383	6,581	9,074	...
Middle ditto	7	1,037	641	724	313	3	536	454	44	453	24,906	18,231	16,967	7
Middle class Vernacular.	177	10,017	7,372	384	9,633	2	8,254	1,628	233	830	39,400	28,735	1,023	57
Lower class Vernacular.	10	354	204	54	300	...	191	45	118	1,536	53,838	40,104	318	53
Primary Vernacular	12	310	216	...	310	...	87	62	161	16,030	360,012	274,764	115	350
<i>Schools for European and other foreign races.</i>														
Schools for Boys ... ..	...	...	...	...	...	...	...	...	...	8	1,637	1,374	1,637	...
Mixed schools ... ..	...	...	...	...	...	...	...	...	...	18	786	599	786	...
<i>Schools for Girls.</i>														
For natives of India	1	140	88	68	72	...	140	...	...	445	9,985	7,128	417	9
For European and others.	...	...	...	...	...	...	...	...	...	11	991	706	991	...
Total	316	28,728	21,206	16,010	12,704	252	22,647	5,130	699	19,436	502,440	379,300	33,080	460

ICATION—continued.

the official year beginning 1st April 1877 and ending 31st March 1878.

INSTITUTIONS.				UNAIDED INSTITUTIONS.				GRAND TOTAL OF—							
Religion of students as on 31st March.				Religion of students as on 31st March.				Grand total of students on the rolls on 31st March 1878.							
Christians.	Hindus.	Muhammadians.	Others.	Number of institutions.	Number of students on the rolls on 31st March 1878.	Christians.	Hindus.	Muhammadians.	Others.	Grand total of institutions.	Grand total of students on the rolls on 31st March 1878.	Christians.	Hindus.	Muhammadians.	Others.
51	631	19	...	1	220	...	220	...	...	19	2,003	62	1,805	70	...
...	...	...	...	...	...	...	...	...	...	5	316	3	293	19	...
...	...	...	...	...	...	...	...	...	...	1	145	38	162	2	...
...	...	...	...	...	...	...	...	...	...	1	87	5	82	1	...
...	...	...	...	...	...	...	...	...	...	5	611	...	...	611	...
...	...	...	...	...	...	...	...	...	...	4	650	6	551	120	...
...
485	30	2	188	...	...	...	...	...	...	35	1,335	486	570	54	276
31	10	...	14	...	...	...	...	...	...	1	61	31	16	...	14
...	...	...	...	...	...	...	...	...	...	1	89	...	88	...	...
...	...	...	...	...	...	...	...	...	...	4	160	...	113	47	...
...	...	...	...	2	91	1	90	...	...	6	239	60	153	26	...
...
43	8,881	457	2	44	9,430	69	8,890	437	34	176	31,688	297	28,373	2,990	88
539	21,622	2,704	41	112	5,075	29	1,826	817	3	572	31,618	571	26,984	3,375	88
276	33,889	5,139	102	50	3,811	4	3,118	680	...	1,087	53,231	282	45,261	7,356	336
226	43,682	9,488	462	58	1,800	3	1,283	488	26	1,901	56,012	220	45,156	10,021	606
1,593	287,691	63,435	7,293	6,084	86,200	1,324	61,152	22,225	1,490	22,126	416,522	2,976	318,630	85,722	8,953
...
1,457	99	35	48	3	492	435	32	2	23	11	3,129	1,592	131	35	71
786	...	...	...	7	514	481	7	8	15	25	1,300	1,270	7	8	15
...
1,240	8,120	562	63	73	1,839	157	1,461	132	89	519	11,964	1,397	9,721	694	133
938	...	...	53	2	160	160	...	...	...	13	1,131	1,698	...	...	63
7,665	404,670	81,839	8,266	6,466	110,232	2,666	81,079	24,798	1,689	26,218	641,400	10,596	508,326	111,767	10,654

B.—EDUCATION—Continued.

33.—Receipts and Expenditure of Educational Establishments in the Lower Provinces of Bengal for the official year beginning 1st April 1877 and ending 31st March 1878.

[illegible]

Schools for Boys (Native).—

Higher English	1,30,577	.....	10,534	13,166	.....	1,452	2,45,677	4,306	4,02,712	3,96,942
{ Government	48,842	.....	3,257	56,569	.....	.....	80,978	3,153	1,96,528	1,95,885
{ Aided	8,850	.....	.....	.....	.....	.....	.....	.....	17,348	17,348
Middle ditto	1,13,463	.....	513	1,41,272	.....	.....	91,357	7,383	3,76,389	3,70,631
{ Government	49,108	.....	57	57,53	.....	408	21,082	186	76,735	76,735
{ Aided	1,07,768	.....	1,420	88,572	.....	525	80,25	5,230	2,53,268	2,51,137
Ditto Vernacular.	1,853	.....	92	1,853	.....	.....	51,013	.....	2,044	2,044
{ Government	77,719	.....	230	16,069	.....	431	.....	6,430	1,53,878	1,54,322
{ Aided	1,853	.....	.....	.....	.....	.....	.....	.....	1,877	1,877
Lower ditto	2,70,672	.....	1,772	40,064	.....	2,365	3,94,806	53,251	7,79,607	7,76,262
Primary ditto	.....	3,957	.....	.....	.....	.....	.....	.....	.....	.....
Schools for Europeans and other foreign races—										
Schools for boys (Aided)	35,458	.....	15,230	8,046	.....	.....	89,255	6,397	1,54,425	1,41,765
Mixed schools (Aided)	13,987	.....	.....	9,000	.....	420	13,475	1,175	38,117	38,439
Schools for Girls—										
Government	6,808	.....	.....	.....	.....	.....	1,337	.....	8,145	8,145
Aided (Native, European, &c.)	68,407	.....	1,210	1,19,993	.....	181	26,237	18,154	2,36,354	2,27,357
Charges for Schools abolished during the year	31,050	.....	.....	975	.....	58	1,920	525	34,049	34,049
Scholarships—										
In Colleges	79,041	.....	.....	.....	.....	.....	.....	.....	79,041	79,041
{ Government	.....	.....	.....	.....	.....	.....	.....	.....	14,437	14,437
{ Endowed	.....	.....	.....	.....	.....	.....	.....	.....	67,587	67,587
In Schools	67,557	.....	3,627	.....	.....	.....	.....	.....	3,627	3,627
{ Government	.....	.....	.....	.....	.....	.....	.....	.....	87,574	87,574
{ Endowed	71,671	.....	.....	33,903	.....	.....	.....	.....	87,574	87,574
Buildings	57,388	.....	.....	8,213	.....	.....	.....	.....	65,702	65,702
Miscellaneous	.....	.....	.....	.....	.....	.....	5,131	.....	.....	.....
Total	2,25,195	4,413	96,239	5,66,206	21,100	5,830	13,03,604	1,38,377	44,34,554	44,43,440

B.—EDUCATION—concluded.

4.—Distribution of Government, Aided, and Inspected Schools in the several Districts and Divisions under the Government of Bengal for the year 1877-78.

1	2	3	4	5	6	7	8	9	10
DIVISIONS.	NAMES OF DISTRICTS.	Vernacular spoken.	Area in square miles.	Population.	Number of schools.	Number of students on the rolls on the 31st March 1878.	Average number of square miles to each school.	Percentage of schools to population.	Number of pupils to each 1,000 of the population.
MEDWAN	Burdwan	Bengali	3,533	2,084,745	1,304	43,192	2.7	.64	21.22
	Bankura	Ditto	1,412	530,892	430	14,410	2.96	.904	27.15
	Beerbhoom	Ditto	1,344	605,351	435	12,362	3.08	.62	17.7
	Midnapore	Ditto	5,332	2,540,963	3,745	73,952	1.357	1.47	28.74
	Hooghly	Ditto	735	737,483	498	16,217	1.37	.66	21
	Howrah	Ditto	639	731,657	127	6,449	5.03	.17	8.52
	Total	Total	12,705	7,200,987	6,380	165,682	1.94	.903	22.72
RESIDENCY	24-Perrannahs	Bengali	2,592	2,210,047	1,250	46,041	2.001	.57	20.8
	Nuddea	Ditto	3,421	1,812,795	809	27,050	4.22	.44	13.41
	Jessore	Ditto	3,658	2,075,021	798	26,138	4.5	.38	12.5
	Moorsheadabad	Ditto	2,578	1,353,658	508	14,443	5.07	.37	10.6
	Total	Total	12,249	7,451,450	3,365	114,572	3.59	.45	13.37
	Calcutta	Bengali	7.8	429,535	261	19,629	.029	.6	45.6
AJSHAHYE	Raishahye	Bengali	2,234	1,316,729	314	9,908	7.1	.24	7.5
	Dumagore	Ditto	4,126	1,501,924	341	7,850	12.069	.227	5.246
	Rongore	Ditto	1,301	680,457	167	3,852	14.02	.16	.66
	Purnea	Ditto	3,476	2,149,972	306	8,500	11.3	.01	3.9
	Julporee	Ditto	1,966	1,211,394	298	10,128	6.6	.24	8.38
	Bengali, Mechi, Garo, Talo, and Bhutia	Bengali, Mechi, Garo, Talo, and Bhutia	1,026	327,955	132	2,804	7.7	.04	8.5
	Bengali, Hindi, Bhutia, Lepcha, and Paharia	Bengali, Hindi, Bhutia, Lepcha, and Paharia	1,284	94,712	34	916	36.2	.359	9.631
	Total	Total	15,563	7,236,373	1,532	44,018	95.019	1.276	43.747

C.—SCIENTIFIC AND LITERARY.

I.—Return of Scientific and Literary Societies in Bengal for the year ending 31st March 1878.

NAMES.	OBJECTS.	INCOME.					MEMBERS OR VISITORS.				Registered or not.	When established.
		From Govern-ment.	From endow-ments.	From sub-scriptions.	Total.		Male.	Female.	Juvenile.	Total.		
Asiatic Society of Bengal	The diffusion of Oriental literature and the encouragement of inquiries into the history, philology, antiquities, and natural history of the countries within the limits of the Continent of Asia.	Rs. A. P.	Rs. A. P. 7,250 0 0	Rs. A. P. 9,000 0 0	Rs. A. P. 16,250 0 0	345	345	...	...	845	Registered	A.D. 1784.
Agricultural and Horti- cultural Society of India.	Promotion of Agriculture and Horticulture in all their useful branches.	.....	.....	20,000 0 0	20,000 0 0	...	624	25	...	700	Ditto	A.D. 1820.
Burra Bazar Family Literary Club.	Literary, scientific and local im- provement, and promotion of social intercourse between Europeans and Natives.	.....	.....	.....	.....	684	684	35	...	684	Not regis- tered.	April 1857.
Calcutta Public Library	The library is a public library of reference and circulation, open to all ranks and classes of the community.	.....	.....	7,298 0 0	7,298 0 0	1,983	1,983	104	...	2,062	Registered under Act XXI of 1869.	1st March 1896.

Supported by the Honorary Secre-
tary, Indian Press Miffick,
at the annual cost of Rs. 65,
more or less.

Alcitra School Book Society.	The object of the Society in the school book department is to promote the cause of education by procuring and distributing school materials and English and vernacular school books of the most important type, and at the lowest possible cost, without regard to commercial profit. The object of the Society in the Vernacular Department is to supply and distribute at the lowest possible price a healthy household literature in the vernacular languages. To promote literary, scientific, and social improvement by means of library, reading-room, and other resources.	6,270 0 0	.....	.....	62,270 0 0	10	Registered, A.D. 1871.
Dalhousie Institute	.....	.....	.....	.....	493 0 0	23	Not registered. A.D. 1859.
Economic Museum	The Museum was established for the collection of the products of Bengal and in order that the natural and industrial products of the province might be brought together, the method and co-ordinated, the purpose of ascertaining all that is really known concerning them, and then circulating this information in the most useful and practical shape that can be devised.	12,144 0 0	.....	.....	12,144 0 0	1,273	Ditto 7th April 1874.
Indian Museum	Illustration of Indian Archaeology and Natural History.	56,940 0 0	.....	.....	56,900 0 0	...	A.D. 1868. Incorporated by the Act of Indian Legislature, No. 22 1876.
The Students' Association	The discussion held, as far as possible, the practical furtherance of different questions of importance affecting the welfare of the Ben- gali community.	.....	.....	.....	150 0 0	688	Not registered. 24th April 1875.
					150 0 0	183	Members ... Visitors ...

C.—SCIENTIFIC AND LITERARY—continued.

Journal of Scientific and Literary Societies in Bengal for the year ending 31st March 1878—continued.

NAMES.	OBJECTS.	INCOME.				MEMBERS OR VISITORS.				Registered or not.	When established.
		From Govern-ment.	From endow-ments.	From sub-scriptions.	Total.	Male.	Female.	Juvenile.	Total.		
Albert Institute	Library and reading-rooms Lectures on literary and scientific subjects. Public meetings for the furtherance of objects of public improve-ment.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Average daily attendance at the news- paper reading-room, 34.	18	...	...	Registered.	26th April 1876.
Calcutta Improvement Association.	The intellectual, moral, and social improvement of the members.	150 per month.	...	...	...	...	...	...	...	Not regis-tered.	January 1873.
Soldiers' Institute, Fort William.	To provide a reading-room and library for the soldiers of the garrison, and also for quiet recreation.	Rs. 150 per month.	...	...	...	On an average at most Rs. 150 to Rs. 300 per month.	...	...	...	Ditto	A.D. 1860.
<i>In the Burdwan Division.</i>											
Burdwan Reading Club	Diffusion of knowledge	.....	.....	504 4 0	504 4 0	63	...	...	63	Ditto	August 1875.
Burdwan Newspaper Reading Club.	Ditto	.....	.....	20 0 0	20 0 0	12	...	...	12	Ditto	January 1878.
Raneesunee Native Public Library.	The object of the library is to enable the members and Secretaries to improve themselves and keep pace with the progress of literature and science.	308 0 0	435 8 0	743 8 0	743 8 0	36	...	20	58	Ditto	January 1876.
Midnapore Mahomedan Literary Society.	To diffuse among the Mahomedans English, Arabic, and Persian education.	.....	.....	.....	.....	35	...	...	35	Ditto	7th Sept. 1873.
Howrah Mechanics Institute.	Reading-room	.....	.....	4,718 7 0	4,718 7 0	215	2	...	217	Ditto	A.D. 1845.

Name of Association	Objects of the Association	30 0 0	216 0 0	216 0 0	42 0 0	9	51	Ditto	16th Feb 1876.
Ala Hitaisini Sabha	The objects of the Sabha are to educate the poor, to distribute medicines to the indigent sick, to support poor widows and orphans, and to ameliorate the social, moral, and intellectual condition of the inhabitants of Ala and the places adjoining.	240 0 0	753 0 0	1,179 0 0	156	...	126	Ditto	5th April 1868.
Uttarparah Hitakaree Sava.	In addition to the objects enumerated above, to encourage technical education in Uttarparah and the adjoining villages.	.....	42 0 0	42 0 0	16	8	19	Ditto	January 1870.
Baksa Social Association	To promote the welfare of Baksa and the adjoining villages.	.....	.....	.....	.....	.....	.....	.....	.....
<i>In the Presidency Division.</i>									
Satikshira Agricultural Society.	To reform the defects in the old system of agriculture.	.....	360 0 0	3-0 0 0	...	...	...	Ditto	26th Feb. 1871.
Satikshira Public Library.	For the diffusion of knowledge	.....	30 0 0	30-0 0 0	...	...	...	Ditto	April 1873.
Sripore Public Library.	Ditto ditto	.....	(Returns not received.)			...	...	Ditto	12th April 1872.
Harisava for encouraging Hinduism.	To promote the Hindu religion	.....	31 8 0	31 8 0 0	26	...	26	Ditto	B.S. 1250.
Joyanagar Harisava	Ditto ditto	.....	50 0 0	52 0 0	13	...	13	Ditto	B.S. 1275.
Mazhpore Doshitashini	To promote the welfare of their native country.	.....	48 0 0	48 0 0	16	...	16	Ditto	Since four years
Baranagar Social Improvement Society.	To improve the general intelligence and to promote the general improvement of the community.	.....	100 0 0	100 0 0	...	...	...	Ditto	A.D. 1847.
Baranagar Public Library	A reading as well as a circulating library, both English and Vernacular.	.....	110 6 0	110 0 0	...	...	...	Ditto	A.D. 1867.
Moorshedabad Association.	The object of the Association is to improve the condition of the inhabitants of the city of Moorshedabad in matters relating to the diffusion of knowledge and the spread of civilization.	.....	620 10 8	620 10 8	84	1	85	Ditto	6th Sept. 1877.
<i>In the Rajshahi Division.</i>									
Deshapattya Hit Sadhani Sava.	To promote public or general welfare.	.....	The expenditure is met by subscription among the reading members. No subscription per month.			16	16	.....	.....

C.—SCIENTIFIC AND LITERARY—continued.

I.—Return of Scientific and Literary Societies in Bengal for the year ending 31st March 1878—continued.

NAMES.	OBJECTS.	INCOME.				MEMBERS OR VISITORS.				Registered or not.	When established.
		From Govern- ment.	From endow- ments.	From sub- scriptions.	Total.	Male.	Female.	Juvenile.	Total.		
<i>In the Dacca Division.</i>											
Tata Sahitya Samaj Dacca.	Cultivation of letters and general work of public utility.	.....	.....	Rs. A. P. 50 0 0	Rs. A. P. 50 0 0	8	...	35	43	Not regis- tered.	August 1877.
Kalpara Gyan Daini, Dacca.	For the improvement of know- ledge.	.....	.....	.....	.....	6	...	143	149	Ditto	A.D. 1858.
Kakutia Gyan Mihir Bikash, Dacca.	Ditto ditto ditto	.....	3 0 0	.....	3 0 0	8	...	32	40	Ditto	A.D. 1858.
Mysore Babayounaf Sachin, Dacca.	Ditto ditto ditto	.....	6 12 0	.....	6 12 0	8	...	25	35	Ditto	A.D. 1853.
Subodhayini, Dacca	Ditto ditto ditto	.....	.....	40 0 0	40 0 0	35	...	13	50	Ditto	B.S. 1280.
Gyanpradaini, Dacca	Ditto ditto ditto	.....	.....	.....	.....	6	...	53	61	Ditto	13th May 1863.
Gyan Daini, Dacca	Ditto ditto ditto	.....	.....	.....	.....	7	...	57	64	Ditto	December 1876.
Female Improvement Association, Burisal.	To spread education among the females of the district by exami- nation and rewards.	100 0 0	.....	.....	100 0 0	30	...	...	30	Ditto	A.D. 1871.
Bachargunge Improve- ment Society.	To promote the cause of female education and to discourage in- toxication and other evil customs of the district.	.....	35 0 0	101 9 6	136 9 6	9	...	65	74	Ditto	January 1877.
Students' Association at- tached to the zillah school, Mymeringh.	Moral and literary culture, espe- cially in speaking and writing.	.....	.....	.....	.....	30	...	...	30	Ditto	1st July 1877.
Gyan Bikashini Sabha, at- tached to the Doorga- pore School, Mymer- ingh.	Discussion and the improvement of Society.	.....	.....	23 8 0	23 8 0	25	...	33	58	Ditto	15th July 1876.
Gyanpradayini Sabha, attached to the Har- dinge School, Mymer- ingh.	Literary improvement, especially in speaking and writing.	.....	.....	.....	.....	125	...	4	129	.....	April 1863.

C.—SCIENTIFIC AND LITERARY—continued.

I.—Return of Scientific and Literary Societies in Bengal for the year ending 31st March 1878—concluded.

NAMES.	OBJECTS.	INCOME.				MEMBERS OR VISITORS.				Registered or not.	When established.
		From Govern- ment.	From endow- ments.	From sub- scriptions.	Total.	Male.	Female.	Juvenile.	Total.		
<i>In the Bhampur District—concluded.</i>											
Banka Public Library, Bhagulpore.	Circulation of newspapers and books.	Rs. A. P.	Rs. A. P.	Rs. A. P. 256 0 0	Rs. A. P. 256 0 0	37	..	..	37	Not re- gistered.	A. D. 1870.
Sultaingunge Public Library, Bhagulpore.	Reading-room for the perusal of English, Urdu, and Hindi books.	.....	.....	.....	.....	8	..	5	13	Ditto ..	A. D. 1869.
<i>In the Orissa Division.</i>											
Utkal Bango Bhasa Sanskrit Sabha.	To improve Bengali speaking among the Bengalis of Orissa.	.....	.....	5 0 0	5 0 0	15	..	55	70	Ditto ..	23rd March 1877.
Young Men's Association.	To improve English speaking and writing.	.....	9 8 0	1 8 0	11 0 0	..	..	20	20	Ditto ..	21st April 1877.
Utkal Sabha	Improvement of the Urya language.	.....	5 0 0	.....	5 0 0	29	..	50	70	Ditto ..	7th July 1874.
Young Men's Union ..	Improvement of English speaking and reformation of moral character.	.....	.....	5 0 0	5 0 0	20	..	35	55	Ditto ..	12th May 1877.
Sanskrit Bhasa Bibar-dhini.	To improve Sanskrit speaking and writing.	.....	.....	.....	.....	2	..	7	9	Ditto ..	4th August 1877.

C.—SCIENTIFIC AND LITERARY.

2.—THE PRESS.

*Annual Return of Presses worked, and Newspapers and Periodicals
published thereat, in the Bengal Presidency during 1877-78.*

C.—SCIENTIFIC AND LITERARY—continued.

2.—THE PRESS.

Annual Return of Presses worked, and Newspapers and Periodicals published thereat, in the Bengal Presidency during the year 1877-78.

District.	Name of Press.	Name of Proprietor.	PUBLICATIONS THEREAT.		REMARKS.
			Newspapers.	Periodicals.	
Burdwan Burdwan Burdwan Midnapore	Burdwan Press	Pearly Lall Sing	Nil	Nil.	(a) Semi-monthly. (a) Weekly. (a) Weekly.
	Nil	Nil	Nil	Nil.	
	Mission Press	F. W. B. Mission Society	Midnapore Samachar(a)	Annual Reports	
	Budharani Press	Okhoy Chandra Sircar	Sadharni(a)	Medical Journal in Sanskrit	
Hooghly	Chandur Press	Kasi Nath Bhattacharjee	Education Gazette(a)	Medical Companion.	This Press executes chiefly municipal work. (a) Weekly. (b) In monthly posts.
	Chandur Press	Nobin Chandra Nund	Nil	Local Companion.	
	Alfred Press	Gangadhar Karmakar	Nil	Bengali Almanac.	
	Municipal Press	Gangadhar Chandra Dey	Nil	Mohabbat.	
Howrah	Kasheekundo Press	Kalikesra Mundul	Bissodoot(a)	Kasheekundo(b)	(a) Weekly. (b) Monthly. Monthly. Monthly. Weekly.
	North Suburban Press	Shosee Pado Banerjee	Nil	Bharut Sranibi or the Indian Workman.	
	Bishwa Dut Press	Sarabtha Sadhinee Sobha	Nil	Sarabtha Sadhinee Partika.	
	Burdwan Press	Sunjoy Chandra Chattopjee	Nil	Bungodurson	
24-Pargunnahs	Shedho Shingrah Press	Shedho Chandra Roy and H. Rish Chandra Roy.	Bharut Sunsskaruk	Nil	(a) Daily. (b) Bi-weekly.
	Mortoz Press	Golan Mortoz.	Nil	Nil.	
	Kohun Press	Kolemundin.	Nil	Nil.	
	Kadira Press	Kadir Bux.	Nil	Nil.	
Suburban Press	Sutaria Press	Abdul Suttar.	1. Bengali and Urdu translation of war tokens (a). 2. Mohamudde Akbar (b).	Nil	Discontinued from 8th April 1878.
	Almudi Press	Asar Hossain.	Bongo Hutoysh	1. Bishwa Dursan. 2. Aja Pratiola.	
	Mohamudde Press	Abdool Khali	...	...
	Suburban Press	Hurry Chunder Bose	...	...

Presidency.	District.	Shariatik Press.	Sumbad Press.	Brojo Madhab Bose	Brahmo Public Opinion (a).	1. Jotirangun (b). 2. Bengal Magazine (English) (b).	(a) Weekly. (b) Monthly.	(a) Weekly. (b) Monthly.
Nuddica	Jessore	Shariatik Press	Shariatik Press	Joyopal Bose.	.....	.....	.....	This Press has now been transferred to the Presidency Jail.
		Shariatik Press	Shariatik Press	Government	.....	.....	.....	(a) Weekly.
		Shariatik Press	Shariatik Press	Government	.....	.....	.....	Both monthly and weekly.
		Shariatik Press	Shariatik Press	Dwarika Nath Bidyabhusan	1. Shomprokash (a) 2. Kaluapokash.	Grambaria Prokashika	.....	.....
Moorsheadabad	Dumraon	Shariatik Press	Shariatik Press	Hareo Nath Mozoomdar	Nil	Nil	.....	.....
		Shariatik Press	Shariatik Press	Nil	Pratikur	Nil	.....	.....
		Shariatik Press	Shariatik Press	Katikha Pershad Gangooly	Pratindhi (weekly)	Nil	.....	.....
		Shariatik Press	Shariatik Press	Jodo Nath Banerjee	Moorsheadabad Patrika	Nil	.....	.....
Dumraon	Dumraon	Shariatik Press	Shariatik Press	Naran Prasad Chatterborty	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Rai Sitab Chand Nader Bana-	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	door.	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Nil	Nil	Nil	.....	.....
Rajshahiye	Rajshahiye	Shariatik Press	Shariatik Press	Secretary to the Bauleah	1	Nil	.....	.....
		Shariatik Press	Shariatik Press	Dharmasava for the	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	banaz.	Nil	Nil	.....	.....
		Shariatik Press	Shariatik Press	Gokal Chunder Chowdhry and	Nil	Nil	.....	.....
Pohua	Pohua	Shariatik Press	Shariatik Press	Kristo Kanto Saha.	Nil	Nil	.....	.....
		Shariatik Press	Shariatik Press	Fauzdar Kollaman Khan, Raj	Nil	Nil	.....	.....
		Shariatik Press	Shariatik Press	Kumar Sircar, and Hurro	Nil	Nil	.....	.....
		Shariatik Press	Shariatik Press	Kumar Sircar.	Nil	Nil	.....	.....
Darjeeling	Darjeeling	Shariatik Press	Shariatik Press	Public	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Mahana Kunjun Roy Chow-	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	dhry.	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	R. D. O'Brien	.....	.....	.....	.....
Dacca	Dacca	Shariatik Press	Shariatik Press	Church of Scotland	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Church of Scotland	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Mr. C. E. Kemp	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Mr. C. E. Kemp	.....	.....	.....	.....
Backergunge	Backergunge	Shariatik Press	Shariatik Press	Mr. C. E. Kemp	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Mr. C. E. Kemp	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Mr. C. E. Kemp	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Mr. C. E. Kemp	.....	.....	.....	.....
Mymensingh	Mymensingh	Shariatik Press	Shariatik Press	Mr. C. E. Kemp	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Mr. C. E. Kemp	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Mr. C. E. Kemp	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Mr. C. E. Kemp	.....	.....	.....	.....
Farrukhpoore	Farrukhpoore	Shariatik Press	Shariatik Press	Mr. C. E. Kemp	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Mr. C. E. Kemp	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Mr. C. E. Kemp	.....	.....	.....	.....
		Shariatik Press	Shariatik Press	Mr. C. E. Kemp	.....	.....	.....	.....

C.—SCIENTIFIC AND LITERARY—continued.

2.—THE PRESS—continued.

Annual Return of Presses worked, and Newspapers and Periodicals published thereat, in the Bengal Presidency during the year 1877-78—continued.

1	2	3	4	5		6
DIVISION.	District.	Name of Press.	Name of Proprietor.	PUBLICATIONS THEREAT.		REMARKS.
				New-papers.	Periodicals.	
Chittagong { Rangpur { Noakhali		Nil	Nil	Nil	Nil.	
		Behar Bandhu	Modun Mohun Bhatt	Behar Bandhu	Nil.	
		Behar Herald	Trust Property	Behar Herald	Nil.	
	Patna	Mutke Mohannade	Syed Asrar Ali	Aries Behar	Nil.	
Gya Shahabad		Subha Sadiq	Syed Wazir Ali	Nasim Sahar	Nil.	
		Mahomed Akbar Khan	Mahomed Akbar Khan and Mirza Lutful Khan.	Behar Punch	Nil.	
		Nil	Nil	Nil	Nil.	
	Muzaffarpore	Behar Scientific Society's Press.	Behar Scientific Society	1	Nil	Weekly.
Durbhanga Saran Chumpran		Trinnet Mission Press	Evangelical Mission Society	Nil	Religious Tracts in Hindi and Urdu	
		Messrs. Jones and Company's Press.	Messrs. Jones and Company	Nil	Nil	Prices-current and job work.
		Nil	Nil	Nil	Nil.	
		Naseem Press	Akhoy Coomar Chatterjee	Nil	Nil	Job work.
		Nil	Nil	Nil	Nil.	